

# THE NATIONAL **P**

APRIL 31, 1960

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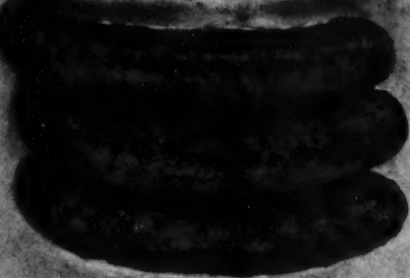
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## Provisioner

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VOLUME 143 DECEMBER 31, 1960 NUMBER 27

THE NATIONAL **P**rovisioner

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THE NATIONAL PROVISIONER, DECEMBER 31, 1960



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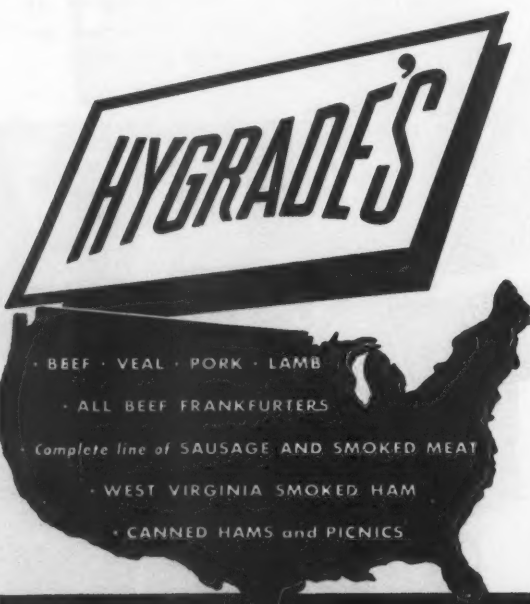
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- T-112—CARCASS SPLITTING SAW: Best & Donovan, 1 HP. 220/3 ph/60 cycle, w/Thor Balancer.
- T-116—BEEF SHACKLES: (11) Boss.
- T-117—SHEEP SHACKLES: (18).
- T-118—PAUNCH TABLE: stainless steel top, 11'3" long, 38 1/2" wide, on galv. frame, w/stainless steel lift & hopper, 250# cap. Comet electric hoist.

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- T-121—GRINDSTONE: Globe, 40" x 6" face, 2 HP.
- T-122—HOG OR CALF HOIST: Boss Jerkless, right hand, 11' high.
- T-123—CUTTING TABLE: stainless steel top, galv. frame, 6' x 2'10", w/removable cutting boards.
- T-126—LAVATORY: stainless steel, Philadelphia.
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- T-128—EVAPORATIVE CONDENSOR: Krack Eng.
- T-129—COMPRESSOR: York D-6 Ammonia, 5 x 5, 15 HP. mtr. 220/3/60.
- T-130—AMMONIA COMPRESSOR: York D-8, 15 HP, 220/3/60 motor.
- T-131—CONDENSOR: York Ammonia, 15" x 9'5", w/46 tubes 1 1/4" x 9' long.
- T-132—AMMONIA RECEIVER: 8" overall.
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- T-134—BLOWERS: (2) York Ammonia, brine spray.
- T-135—AMMONIA COMPRESSOR: York model A432E, 4 x 4, 3 cylinder, 20 HP. mtr. 220 volt, 3 ph, 60 cycle.
- T-136—AMMONIA CONDENSOR: (shell & tube) 14" x 12'-6" pass for cooling tower opening, equipped with ammonia water regulating valve.
- T-139—COOLING UNITS: (4) Gebhardt mdl. 215 FC, stainless steel insulated pan w/2-speed fan motor.
- T-140—COOLING UNIT: Gebhardt mdl. 188 BH, stainless steel insulated pan, w/necessary expansion valves, thermostats & solenoid valves.
- T-141—CONDENSING UNIT: York mdl. 50 HE, 5 HP. Freon.
- T-142—CONDENSOR: Kramer Unicon air cooled BD500.

- T-143—THERMOBANK: Kramer mdl. TV350, complete w/all automatic defrosting controls & thermostatic controls.

## SCALES

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- T-148—BENCH SCALE: Toledo 250#, w/2-tare beams 50# & 100#, portable stand.
- T-150—PLATFORM SCALE: Fairbanks, approx. 3500# cap., 4' x 4' platform.

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- T-152—OFFAL TRUCKS: (3) A Frame, 1-Boss, 2-Globe galvanized.
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- T-155—HEAD TRUCK: galv., 12-head racks.
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Mr. Barliant will be at the Trenton Dressed Beef Co. 63 Bloomsbury St., Trenton, N.J. (phone EXport 3-4176) on Jan. 11, 1961. For additional information prior to the sale, please contact Barliant & Co. Chicago Office.

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# THE NATIONAL PROVISIONER

December 31, 1960

VOLUME 143 NO. 27

## Happy New Year

As the door opens on the new year, the meat industry can peer in with a little better than hope that 1961 will be a happier period than 1960.

Relish it or not, the prosperity of much of the industry seems to be tied to volume and in 1961 the spring should bring somewhat greater hog marketings and cattle volume is expected to continue high. Cattle and beef values may be extra sensitive and will require watchfulness.

The reality of a business recession cannot be denied, but this will have to be more protracted and deeper than now is expected to have a significant effect on the meat business.

One of the great unknowns, of course, is the governmental environment in which the industry will operate. While there are fewer apprehensions today about "experiments" and radical changes than there were a few weeks ago, we believe meat packers and all other businessmen should expect that their relationships with each other and with the public will be examined more critically than in the past. We expect, for example, that there will be a more exacting administration of the Packers and Stockyards Act, that the pressure for state humane slaughter legislation will increase and that government agencies charged with regulation of business will show less open "friendliness" to the objects of their regulation.

We hope that we can expect labor-management conflict to diminish in 1961. The situation in this area closely parallels that in the world today; no one wins in the "big strike" anymore than in an atomic war.

As the meat industry grows in 1961 and the rest of the sixties—to feed an expanding U. S. population—we hope that small and large packers will remember that their capital needs will expand also, even though they only maintain their relative positions in the business.

One way to insure that capital will be available for expansion and "keeping pace" is to turn in a profitable performance all the time. That job is up to management.

## News and Views

**Renewed Efforts** to keep various segments of the food industry in their own back yards are expected in the 87th Congress, convening January 3. The House small business subcommittee that investigated problems in the food industry during the last Congress, in a majority report made public this week, attacks what it calls the industry's trend toward a "concealed cartel system" and urges strengthening of anti-trust legislation and enforcement to preserve small business. The subcommittee is headed by Rep. James Roosevelt (D-Cal.), who in the 86th Congress introduced legislation that would have barred meat packers of a certain size from retailing and retailing from processing. The majority report recommends a ban on integration of retailing with meat packing or other food processing "where the effect of such integration of functions would be to substantially lessen competition or tend to create monopoly."

In addition to other legislation to strengthen anti-monopoly laws, the majority urges that greater resources be provided for the Packers and Stockyards Division of the U. S. Department of Agriculture, the Federal Trade Commission and the anti-trust division of the Department of Justice and that the agencies be "otherwise encouraged to provide more expeditious and effective enforcement of the anti-monopoly laws entrusted to them." The majority also recommends that the Secretary of Agriculture "utilize to the fullest extent possible experienced career administrators and advisers who are in sympathy with, and have enthusiasm for, vigorous and effective enforcement of the Packers and Stockyards Act."

A minority opinion by the two Republican members of the subcommittee takes strong exception to the majority report.

Another move to transfer jurisdiction over packer trade practices from the USDA to the Federal Trade Commission also may take place in the new Congress. The report on regulatory agencies submitted last week to President-elect Kennedy by James M. Landis says an overlap exists between two agencies "with regard to unfair trade practices of persons in the meat packing industry" and adds: "There is no reason why full jurisdiction over the meat packing industry in that respect should not be returned to the Federal Trade Commission."

**New Developments** in the livestock and meat industry in Canada and the United States will be highlighted during the 41st annual meeting of the Meat Packers Council of Canada on Tuesday and Wednesday, February 7-8, at the Royal York Hotel, Toronto. Ralph Bennett of the Canada Department of Agriculture will discuss livestock developments in that country on Tuesday morning, and Paul Zillman will present a similar analysis of the U. S. situation on Tuesday afternoon. Two panel discussions also are scheduled for Tuesday, one in the morning on beef quality and the other in the afternoon on pork quality. Dr. Marcus Long, department of philosophy, University of Toronto, will be the annual dinner speaker on Tuesday evening. The Wednesday morning session will feature Warren Tauber of Visking Co., division of Union Carbide Corp., Chicago, on new developments in sausage; J. A. Dalve of The E. Kahn's Sons Co., Cincinnati, on low temperature fat separation, and Jim Schneider of Purdue University, Lafayette, Ind., on the use of electronic computers.

**Net Earnings** of John Morrell & Co., Chicago, for the fiscal year ended October 29, 1960, dropped to \$3,560,852, or \$3.17 a share, from \$6,143,237, or \$5.58 a share, in fiscal 1959 but were the second highest in the company's history, president W. W. McCallum reported this week. Sales for the 1960 year were a record-high \$511,792,499, compared with \$436,315,469 in the 1959 period, he said.

**M**EAT IS packaged for four primary reasons: 1) to protect the product from contamination with bacteria and filth, 2) to retard or prevent loss of moisture by the product, 3) to shield the product from oxygen and light and 4) to facilitate handling.

Packaging retail meat probably is the most important type of meat packaging. Both cuts and ground meat are concerned here, including the following categories: 1) canned and 2) otherwise packaged (a) cured, uncooked, (b) cured, cooked or ready to eat, (c) fresh, uncooked and (d) frozen, uncooked. This two-part discussion will be concerned with category 2(c) only—fresh, uncooked meat.

Although it is practiced widely in the supermarket trade of the United States and Canada, prepackaging, as applied to fresh meat, can be said to be only partially successful because in accomplishing the basic purposes of packaging, it has not substantially increased the sal-

## Here are Facts On Color Changes In Packaging of Fresh Meat Cuts

*Part I of a Two-Part Series by  
C. Olin Ball  
Department of Food Science  
Rutgers University, New Brunswick, N. J.*

able life of meat. The purpose of this discussion is to point out the reasons for the ineffectiveness of packaging in this regard. Because the advantages of retail packaging out-weigh the effects of its deficiencies, the volume of raw meat packaging continues to increase.

The qualities of every retail container must be evaluated carefully during the process of either developing or selecting a container for a specific use. The diversity of these qualities is at a maximum in consumer containers because the inside surfaces of every retail primary container are in contact with the product.

Besides the requirement of compatibility with the meat, which is imposed by this circumstance, there are other exacting requirements to make the package suitable for retail use. To comprehend the significance of the existing situation in respect to centralized packaging of retail raw meat, one must know the nature of these requirements.

**PERVIOUS PACKAGES:** The dealers' most serious problem in respect to quality deterioration of self-service fresh meat is appearance. This is primarily a color problem. Dehydration is involved because this aggravates the color problem. A packaging material for self-service fresh meat, therefore, besides being non-toxic and mechanically strong, must possess properties that tend to effect the preservation of color without imparting any harmful substance to the meat.

For the first two days after packaging, a permeable type of package seems to be advantageous because, when air has access to the meat through the package, the oxygen tends to retard the loss of the red-pigmented

oxymyoglobin on the surface of the meat. For this reason, a film which is permeable to gas, such as cellophane (when wet), pliofilm, polyethylene or cellulose acetate, is usually preferred.

Cellophane commonly is used for three reasons: 1) film packaging of fresh meat was started with cellophane and reasons for changing to another film are not sufficiently conclusive to warrant a change; 2) because of its relative stiffness, cellophane handles more easily in overwrapping than pliofilm, polyethylene or cellulose acetate, and 3) cellophane is readily made moisture resistant by means of coatings without greatly affecting the gas permeability of the wet film.

It has been reported that straight polyethylene film of low gauge (0.5 to 0.8 mil), without coating, performs as well as coated cellophane as a wrapping material for fresh meat. Tests of polyethylene in this application have been in progress since 1957.

According to research findings, steaks packaged in polyethylene 1 mil thick are nearly equal in color to steaks packaged in regular meat cellophane. Those packaged in polyethylene 0.5 mil thick hold their red color longer, and those packaged in polyethylene from 2 to 4 mils thick hold their red color a shorter time than steaks in regular fresh meat cellophane. These findings are related directly to the fact that the thinner a film of polyethylene is, the more permeable it is to oxygen.

Most gas-permeable films essentially react alike as packages for fresh red meat, except as they are affected by variations in the loss of product moisture. In all cases the red color fades gradually and is replaced by gray or brown within about 48 hours after packaging.

Moreover, it has been demonstrated repeatedly in the laboratories of the department of food science at Rutgers that maintenance of oxygen pressure at a high level (100 to 350 mm. mercury) in contact with the surface of red meat permits a gradual loss of red color to occur. This phenomenon directly contradicts a widely-held belief that when an atmosphere containing oxygen having a pressure of more than 80 mm. mercury is in contact with fresh meat, the bright red pigment, oxymyoglobin, will be maintained on the surface of the meat.

**IMPERVIOUS PACKAGES:** One way to establish conditions under which meat will have red color after it has been packaged for 48 hours is to use an impermeable container sealed under vacuum.

In impermeable packages or in packages of very low gas permeability, the meat during the first 48 hours after packaging, when held at temperatures between 32° and 40° F., is not so red as that in a highly gas-permeable film. After a period of reduced redness or of almost complete loss of redness, however, a relatively stable red color returns to the meat.

The discovery of a regeneration of red color in meat in the apparent absence of free oxygen came as a surprise because it shattered a widely-held belief that once brown color was produced in packaged meat, the undesirable color was there to stay. That color is developed principally by the formation of a substance called metmyoglobin, which formerly was believed to be a more stable substance than it now appears to be.

In a laboratory study of this phenomenon it was found that when oxygen is mixed with air to form the atmosphere in which fresh red meat is stored in an impermeable container having headspace of excessive volume under a total absolute pressure equal to that of normal atmosphere (760 mm. mercury), the depth of redness deterioration (or the intensity of brown color developed during the first day) decreases in direct relation to the increase in concentration of oxygen in the atmosphere surrounding the meat.

Nevertheless, there is invariably a marked and more



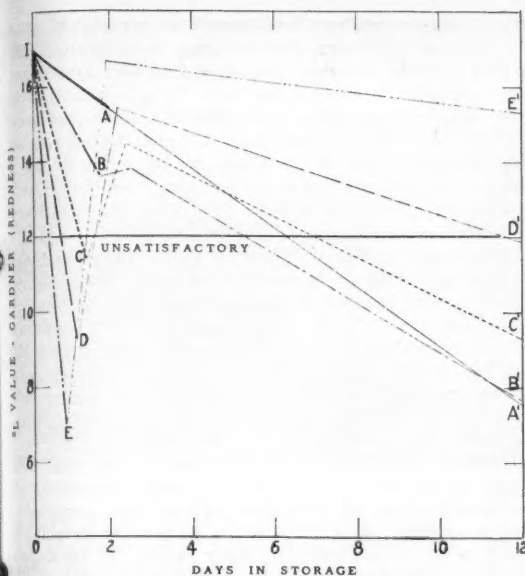


FIGURE 1: Symbolic representation of relative effects of color-influencing phenomena on rate of color change in raw meat packages, showing relationships in Table 1.

or less progressive decrease in redness, signifying an increase in the amount of brown pigment (metmyoglobin) present, during the first few days of storage. Should there then be a regeneration of redness, the amount of return varies inversely as the initial concentration of oxygen in the container. That is, the higher the initial concentration of free oxygen, the smaller is the amount of redness return.

Thus, both the rate of decrease in redness early in storage and the rate of regeneration of redness later are retarded by increase in original concentration of oxygen in contact with the meat. When headspace is of moderate proportions, an increase in headspace, without a change in the initial oxygen concentration, has an effect similar to that of an increase in initial oxygen concentration without a change in headspace.

When fresh meat is held under vacuum in an impermeable container, the color pattern of the meat, in respect to time, depends upon three factors—the degree of vacuum, the volume of the headspace and the particular color characteristics of the meat.

Under the combination of very high vacuum (28 in. Hg.) and very small headspace (10 per cent or less of the volume of the container), there is a rapid deterioration of color followed by a rapid return to redness. The depth of the color deterioration increases with increase of vacuum and with reduction of headspace until the vacuum reaches a certain maximum and/or the headspace volume reaches a certain minimum. The locations of these points are interdependent and the combinations which result in the greatest depth of color deterioration are not known, except that they occur when the vacuum is greater than 2 in. and the headspace volume is less than 10 per cent of the total volume of the container being used.

The amount of color loss also depends on the characteristics of the meat.

**EXAMPLE:** A symbolic graphical representation of the effects of the preceding phenomena on the color of red meat is given in Figure 1. The curves show the relationship between redness of packaged meat, as represented by the redness ( $a_1$ ) reading on the Gardner

Color and Color Difference Meter, and time in storage. Package and storage conditions represented by the five curves, A, B, C, D and E, are listed in Table 1. The curves are oversimplified in order to show only the relationships which have been discussed. Magnitudes, therefore, are approximate.

For example, three films of equal thickness are used to package adjacent cuts from the same muscle. Film No. 1 has the maximum degree of gas permeability, No. 3 has the minimum degree of gas permeability and No. 2 has a medium degree of gas permeability. All have minimum gas space (headspace) within the package and all packages are stored in air at a temperature of 32° F. Under these conditions, the rate of deterioration of red color in film No. 1 may be presented by curve IA, that of meat in film No. 2 by curve IB and that of meat in film No. 3 by curve IC. These curves are represented as group No. 1 (the first three lines) in Table 1 (see below).

The same three curves similarly represent the rates of deterioration of redness as produced by three values of each of four other variables that are represented by the second, third, fourth and fifth groups, respectively (lines 4 to 15), in Table 1.

The second group represents three thicknesses of polyethylene film (0.5, 1.0 and 2.0 mils) in packages of uniform minimum headspace; the third, three concentrations of oxygen (350, 250 and 150 mm. mercury) in impermeable packages of uniform minimum headspace; the fourth, three arbitrary volumes of headspace (maximum, medium and minimum) in impermeable packages containing a uniform high concentration of oxygen (350 mm. mercury), and the fifth, three different storage temperatures (32°, 39° and 46° F.) with packages of uniform maximum permeability having uniform minimum headspace.

The sixth group (lines 16, 17 and 18) of Table 1 represents three different degrees of vacuum: 0 in. (pressure of oxygen, 150 mm.), 14 in. (pressure of oxygen, 70 mm.) and 28 in. (pressure of oxygen, 10 mm.) in impermeable containers of uniform minimum headspace.

Assuming that "minimum permeability" in group No.

TABLE 1

Group Curve		Permeability	Thick-ness (mils)	PRESSURE (mm. Hg.)		Head-space	Storage Temp. (°F.)
					Inside		
				Outside	When sealed		
				Total O <sub>2</sub>	Total O <sub>2</sub>		
1	A	max.	1.0	760 150	760 150	min.	32
	B	med.	1.0	760 150	760 150	min.	32
	C	min.	1.0	760 150	760 150	min.	32
2	A	med.	0.5*	760 150	760 150	min.	32
	B	med.	1.0*	760 150	760 150	min.	32
	C	med.	2.0*	760 150	760 150	min.	32
3	A	0		760 150	760 350	max.	32
	B	0		760 150	760 250	max.	32
	C	0		760 150	760 150	max.	32
4	A	0		760 150	760 350	max.	32
	B	0		760 150	760 350	med.	32
	C	0		760 150	760 350	min.	32
5	A	max.	1.0	760 150	50 10	min.	32
	B	max.	1.0	760 150	50 10	min.	39
	C	max.	1.0	760 150	50 10	min.	46
6 & 7	C	0		760 150	760 150	min.	32
	D	0		760 150	350 70	min.	32
	E	0		760 150	50 10	min.	32
	D	0		760 150	760 150	min.	39
	E	0		760 150	760 150	min.	46

\*Polyethylene

TABLE 1: Legend for Figure 1, showing conditions which affect color deterioration rate in packaged raw meat.

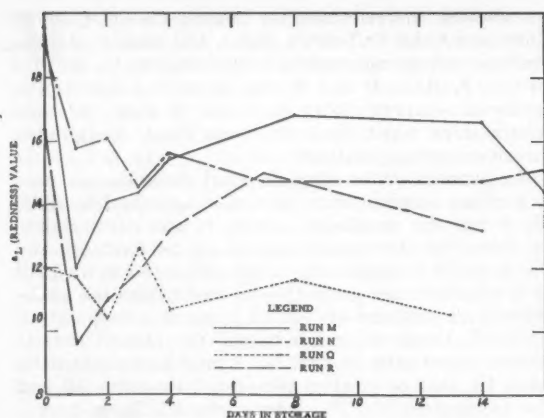


FIGURE 2: Patterns of redness of beef cuts from four different animals, packaged under vacuum of 28 in. in 211 x 011 cans with 10 per cent or less headspace.

1 means essentially an impermeable container, we find that the third line of group No. 1 is the same as the first line of group No. 6; therefore, the latter is represented by curve IC, the curve that represents the third line of group No. 1.

In group No. 6 the meat in the package with the lowest vacuum, represented by the first line of the group, deteriorates in color at the lowest rate. The two packages having higher vacuum, therefore, must be represented by curves showing higher rates of color deterioration than curve IC. These are curves ID and IE, respectively.

Similarly, the meat packaged without vacuum and stored at the two higher temperatures, 39° and 46° F., is represented by curves ID and IE, respectively. Thus, we may say that a seventh group, showing the effects of storage temperature on specimens packed without vacuum, is represented by lines 16, 19 and 20 of Table 1 and is depicted by curves IC, ID and IE in Figure 1 on the preceding page.

**COLOR CYCLE AND VACUUM:** On the basis of research on systems in which certain conditions produce the greatest depth of color deterioration in the early stage of storage, it is known that when these combinations of increase of vacuum and reduction of headspace volume are exceeded, the depth of quick color deterioration begins to decrease. These observations might lead to the assumption that complete absence of free oxygen in the container, including absence of adsorbed oxygen, would result in no formation of brown color (metmyoglobin).

Such a system has not been produced, either experimentally or otherwise, to our knowledge, and it is possible that oxygen, made available through conversion of oxymyoglobin to reduced (purple-red) myoglobin, would be utilized in the production of some metmyoglobin. Thus, we do not know that redness change in a perfect vacuum would be strictly limited to a conversion of oxymyoglobin to reduced myoglobin.

In laminates of polyethylene the thickness of the polyethylene affects the pattern of redness change, presumably because perviousness increases as thickness decreases.

With each of the five color deterioration curves (IA, IB, IC, ID and IE, Figure 1) is associated a typical pattern of color change. A low rate of color degeneration, IA, during the first two days is followed by more of the same—a continuation of color deterioration at ap-

proximately a uniform low rate as in curve AA'.

A somewhat higher rate of color deterioration, IB, during the first two days usually is followed by a slight regeneration of redness and then by a resumption of color degeneration (see curve BB') at a somewhat lower rate than that of curve AA'. A higher initial rate of color degeneration, IC, is likely to be followed by a substantial redness regeneration and then by a deterioration of redness (curve CC') at a comparatively low rate.

The highest rates of initial deterioration of redness—those occurring in vacuum-sealed impermeable containers having minimum headspace and in non-vacuum-sealed containers of the same type stored at temperatures higher than 32° F. and represented by curves ID and IE—usually show return of red color at rates corresponding to their rates of initial loss of redness and then by periods of several days of comparatively stable red color. See curves DD' and EE', Figure 1.

**COLOR HISTORY:** It is emphasized that the five curves of Figure 1 are regarded merely as typical of the combinations of conditions which they represent. Taken together, they illustrate a pattern of principles which seem to underlie the color history of packaged raw meat. Although, very often, there may not be reasonable agreement between reality and the values taken from the typical curves, the results of extensive studies, nevertheless, justify a conclusion that these curves depict the overall pattern of the phenomena that have been described when beef having a relatively high degree of bloom is packaged.

The character of the meat itself has a strong influence on the pattern of color change produced. Also, the intermingling of the effects of the various influencing conditions creates very complex combinations of relationships which may be difficult to analyze.

A characteristic of meat sealed in impermeable containers is that, following any consistent and sustained regeneration of redness, there is almost never a substantial loss of redness (see Figure 2). However, when such a container, during a later stage of storage following a substantial return of redness, develops a leak that admits air, the meat will lose redness because of the presence of oxygen admitted by leakage. When vacuum is restored, the red color reappears.

In Figure 2, note the variation in the pattern of color change among loin cuts from different animals when subjected to the same storage conditions.

(Next week, in the final section of this two-part series, Dr. Ball will discuss the effects of film properties; factors involved in centralized packaging of meat; sanitation, bacterial spoilage and chemical spoilage; drip and loss of weight, and current practices of centralized meat packaging operations.)

## 9th Annual Industrial Packaging Course Is Set by Purdue University

The ninth annual two-week Purdue University course in industrial packaging has been scheduled for March 20-31, 1961, on the campus in Lafayette, Ind. The course offers a basic knowledge of containers and packaging materials to executives, purchasing agents, salesmen and others involved in packaging.

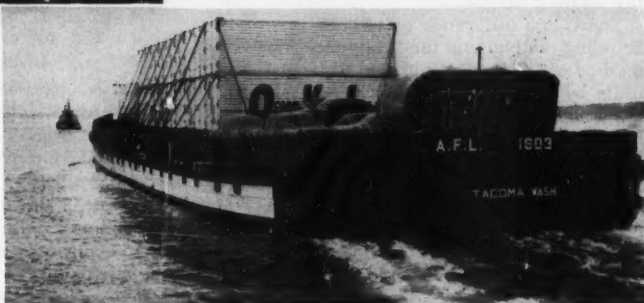
Lectures and demonstrations by authorities from the packaging industry and Purdue engineering professors will be coordinated during the course by packaging consultant Charles J. Zusi.

Additional information and registration blanks are available from Mark E. Ocker, who can be contacted at the division of adult education, Memorial Center, Purdue University, Lafayette, Ind.

# Van-Barge System Prevents Dockside Delays in Shipping Meat to Alaska



ABOVE: Costly standbys and dockside delays are eliminated when freight goes by van. As soon as vans—complete trailers in this instance, rather than cargo vans—are loaded aboard barge, towboat takes over to haul van-laden barge along 2,000-mile "ocean freeway" to Alaska. RIGHT: Barge-load of container vans containing meat and other perishables heads out of Puget Sound for Alaska and delivery to consignees throughout territory which is served by Alaska Freight Lines, Inc.



**F**RESH MEAT and other perishables are being shipped from the state of Washington to Alaska quickly and efficiently, thanks to a special fast-freight service pioneered by Alaska Freight Lines, Inc.

The firm ships pre-loaded refrigerated container vans by barge from Seattle to Anchorage, a trip that covers 2,000 miles of "ocean freeway." The AFL service is called "container van fast-freight cargo."

Twice each week in winter and three times a week in summer, Alaska consignees break the seals on container vans that are packed and sealed in the continental United States not more than a week before. The contents are said to be untouched from shipper's warehouse to consignee.

Food establishments and military commissaries in Alaska are now receiving packinghouse-fresh meats and other perishables for the first time. Special refrigeration systems in the container vans hold temperatures constant during the entire period of the long sea voyage.

Clark Equipment Co.'s Brown Trailer division, Spokane, Wash., teamed up with Alaska Freight to provide the reefer units needed for the pioneering venture.

**GAS AND DIESEL:** Organized in

1943 at Fairbanks, Alaska, to haul army contract freight over the Alcan highway, AFL was the first concern to truck freight to Alaska and remains the biggest in this field today.

The company created a stir in the Pentagon five years ago when it fulfilled a contract to deliver 500 tons of supplies and equipment overland from Fairbanks to U.S.-Canadian "Dew (Defense Early Warning) Line" radar screen installations on the Arctic Ocean shore, a haul of more than 400 miles. What made the assignment unique was that there were no real roads along most of the way. Company delivery men just "mushed" through the ice and snow.

Out of its Seattle and Alaskan truck terminals, AFL operates a fleet of 60 tractors running on both gasoline and diesel fuel. There is also an assortment of 48 smaller trucks operating out of the company's Tacoma, Wash., terminal to handle the delivery of small mixed orders to the main marshaling point in Seattle for transfer to the big container vans.

The big tractors move the container vans—200 40-ft. units and an equal number of 30-ft. units—on special trailer chassis. The larger vans each carry up to 50,000 lbs. of fresh meat and other products.

Vans are taken to the shipper's warehouse where cargo is loaded. Refrigeration equipment is adjusted to maintain the proper temperature control and the van is sealed. The cargo remains intact and the seal is not removed until the van has been delivered to the consignee's door.

Tractors move the containers to the Seattle loading dock, where a 45-ton crane is used to lift the large containers from their power units and to set them down on 204-ft. barges. Ocean-going towboats haul the loaded barges to Anchorage, Alaska, in summer and to the all-year port of Seward, Alaska, in winter. The sea voyage requires less than five days and is made at least twice each week throughout the entire year.

**UNLOADING PROCESS:** At the Alaskan port the loading process simply is reversed. Vans are unlocked and lifted down to tractors on the dock. Reefers, which are taken off the barge power supply, are plugged into the tractors' generators. The sealed containers then are hauled to their respective destinations in Seward, Anchorage or Fairbanks, where the seals are broken and the contents unloaded.

Occasionally, some units are landed similarly en route at Valdez,



an intermediate port in Alaska.

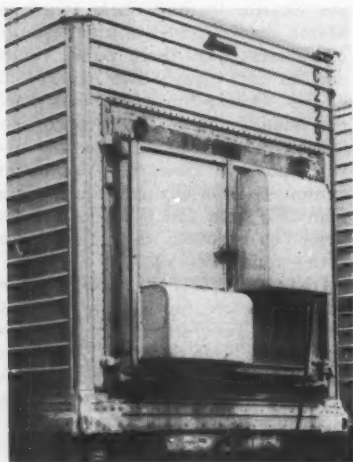
Each barge carries 36 container vans stacked two deep. The four boxes nearest the bow and the six sternmost are 30-ft. vans. All the rest are 40-ft. units. As soon as the vans. All vans are designed to carry self-contained generators on the bow of each barge cut in to supply the reefers' refrigeration equipment at 220 volts.

Van cargo capacity alone is 720 tons per barge. In addition, miscellaneous cargo is shipped in the hatches and two passenger automobiles are carried atop each stack of vans. All vans are designed to carry this load, as well as to permit five men to work on top of them during the loading process.

There is a difference between this shipping method and the "fishyback" method of transporting loaded trailer units by ship, although AFL moves cargo by both methods. In "fishyback" shipments, complete trailers—wheels and all—are placed aboard. But for its container van fast-freight cargo service, AFL transfers the container van only, leaving running gear and chassis at dockside to perform other jobs. This method also conserves space afloat and reduces gross shipping weight, it is claimed by the shipper.

Another unique feature of the AFL operation: the trucking firm owns and operates its own seagoing fleet, including the barges and 10 towboats.

**DAY-NIGHT SERVICE:** AFL maintains complete warehouse, shop, office, pier and loading facilities at Seattle, Tacoma, Anchorage and



**PERISHABLES** are protected en route to Alaska by specially-equipped reefer containers that maintain carefully - controlled temperatures throughout the long ocean voyage.

**TRACTORS** are used in Alaska and continental U. S. to speed vans to and from dockside. Rigs are built to cope with rigorous conditions encountered along Alaskan highways. Tractor shown is hauling 40-ft. van riding atop detachable chassis. Note the refrigeration unit.



Seward. It also operates a truck terminal at Fairbanks. Truck and shop facilities in Alaska are prepared to accommodate tractors at all times during the day or night. Where temperatures dip to  $-40^{\circ}\text{F.}$ , a rig that has stood outdoors overnight would be difficult to start up again in the morning.

In addition to meat and other perishable commodities, cargos often include building supplies, other heavy equipment and household goods for both civilian and military personnel.

Brown Trailer's Spokane plant built 115 of the 40-ft. vans as over-the-road unit-trailers (complete with running gear, landing gear and king pins, but also equipped with special angles mounted to the body for tie-down attachment) and 150 of the 30-ft. containers.

The 40-ft. units are 12 ft. high. They are insulated with fiberglass 3 in. deep on the sides, ends and ceiling and 2 in. deep in the floor, and are lined with  $\frac{1}{4}$ -in. plywood. Flooring is of  $\frac{3}{4}$ -in. plywood. A standard opening has been provided in the front end of these units for Thermo King refrigeration equipment.

The 30-ft. units were designed and built to be lifted off a separate chassis and deposited on the deck or within the hold of a barge. They are 8 ft. long and 8 ft. wide and are insulated with fiberglass in the same dimensions as the longer vans—3 in. deep in walls, ends and ceiling and 2 in. deep in the floor.

The fronts of these units are designed to receive special, flush-mounted Thermo King units manufactured specifically for this purpose. Containers are equipped with special steel castings at the eight corners, designed for lifting, stacking and tying down the units. Undersides of

the units have special receptacles designed to fit over the bolsters on the chassis.

Only air freight could match this kind of performance for speed (weather permitting), according to Brown Trailer, and air delivery has been ruled out as economically unsound except in rare circumstances. The Alcan highway is almost 1,000 miles longer than the sea route and is, at best, no turnpike. Ships reportedly will not do the job nearly as well, either.

**OTHER ADVANTAGES:** The loaded barges draw only 11 to 12 ft. of water and are more easily loaded and unloaded than ships. Shelter for cargo is built into the containers themselves, so that a ship's superstructure would serve only as an obstacle to handling operations and would be dead weight in transit. Furthermore, an AFL barge convoy is manned by a crew of only 14.

Because the containers remain sealed from the time they leave the shipper's warehouse until they are delivered to the consignee, damage in transit and pilferage are eliminated. Since temperature control is maintained throughout the trip, spoilage and other deleterious effects, such as shrinkage of meat, are minimized. These advantages tend to reduce insurance premiums.

There are several other attractive economic aspects:

1) Costly handling is reduced. Only two of these 12 typical piece-meal transfers are required: loading at shipper's warehouse, unloading to dock warehouse, loading to lift boards, unloading to ship's hold, loading to lift boards, unloading to dock warehouse, loading to lift boards, unloading to freight cars, unloading to freight shed, loading to

[Continued on page 32]

## MID Raises Moisture Limits, Tightens Check

A "NEW" HAM containing up to 10 per cent added moisture, a greater emphasis on quality control, new analytical procedures like those used for cooked sausage to determine compliance with the liberalized moisture limits—and, possibly, new arguments to show that no controls are feasible—are in prospect for the New Year in federally inspected plants.

Amended Meat Inspection Regulations scheduled for publication in the December 30 *Federal Register*, and effective immediately, do away with the old requirement that smoked products may not exceed green weight and set forth the new limits, while Meat Inspection Division Memorandum No. 288, dated December 23, outlines the new procedures for control of added moisture in smoked, cooked and canned pork products.

The amendments delete old Sections 17.8(c) (49), 17.8 (c) (54) and 18.7(n) of the regulations and add a new Section 17.8(e), which reads:

"In the preparation of the following cured meat products the following restrictions with respect to the use of moisture shall be observed:

"1) Smoked hams, smoked pork shoulders, smoked pork shoulder picnics and smoked pork shoulder butts, may not contain more than 10 per cent added moisture. Smoked beef tongues shall not contain added moisture.

"2) Cooked cured products such as hams, pork shoulders, pork shoulder picnics, pork shoulder butts, or pork loins, either smoked or unsmoked, prepared with either moist or dry heat, and identified as 'cooked,' 'fully cooked,' 'thoroughly cooked,' 'ready to eat' or 'ready to serve' shall not contain added moisture.

"3) Canned hams, pork shoulders, pork shoulder picnics, pork shoulder butts and pork loins shall not contain more than 8 per cent added moisture."

The notice adds: "Implementation of the foregoing changes in the regulations will be accomplished by inspection routines and laboratory analysis of finished products using generally the same inspection and sampling methods now applied to cooked sausage products."

Dr. C. H. Pals, director of the

Meat Inspection Division, U. S. Department of Agriculture, told the NP this week that the basis for determining normal moisture content will be four times the protein content. Thus, the permissible level of moisture in smoked ham will be four times protein plus 10 per cent. He said that the MID recognizes the variability of protein in pork and provides for this by tolerances in MID Memo No. 288.

**MID MEMO NO. 288:** The memorandum reads: "The Meat Inspection Regulations covering certain smoked, cured and cooked and canned pork products have been amended to provide a requirement based on the added moisture content rather than on added substances as in the past. The determination of compliance with the new regulations will be made by chemical analysis and inspection routines and these instructions will provide for uniform and positive control procedures at all official establishments.

"I. *Establishment Responsibility:* The establishment has the responsibility of preparing products in compliance with the regulations and making available to the inspector such information as is necessary for him to determine that the various ingredients are used in compliance with the Meat Inspection Regulations. It is expected that the establishments will work closely with inspectors in adjusting the method of preparation or amounts of ingredients used in order to comply with the Meat Inspection Regulations. Failure on the part of an establishment to assume its responsibility for complying with requirements may result in retention of product pending analytical results.

"II. *Inspector Responsibility:* The inspector must have a thorough knowledge of pickle formulation, pumping and curing procedures, smoking, cooking and chilling practices. This knowledge must be adequate to assure that all substances used in the curing process are within the limits provided by the regulations. The inspector will assure himself that all product distributed from the establishment is in compliance with the regulations.

"III. *Sampling:* In those establish-

ments where the inspector in charge has knowledge that present control procedures are effective, one sample of each class of product will be submitted weekly. If the inspector in charge does not have knowledge that present controls are effective, samples of each class of product will be taken not less than twice weekly in order to evaluate establishment procedures and controls. After sufficient data are received they will be evaluated as the basis for developing further instructions.

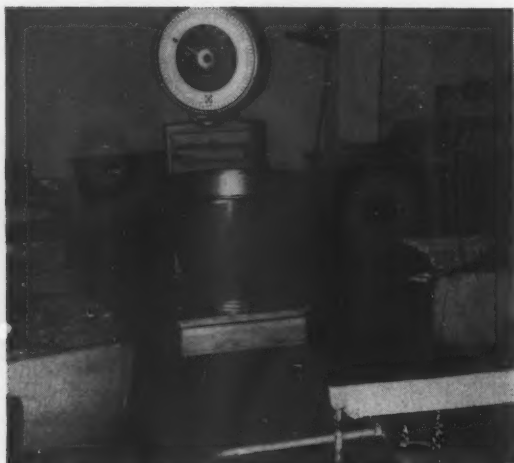
"IV. *Sample:* A sample of cured and smoked or cured and cooked product shall consist of a center slice 1 in. in thickness from one ham, one pork shoulder picnic, or a 1-lb. section of one pork shoulder butt. Samples of cured and canned product shall consist of one can. Samples shall be selected at random from the lot being examined. Form MI-422 should bear a notation showing the quantity of gelatin added to canned products. The sample should be placed in a tight plastic bag and forwarded to the appropriate meat inspection laboratory with the request for determination of added moisture.

"V. *Interpretation of Results:* The laboratory will report percentage of added moisture found without reference to compliance or lack of compliance of the product. Use of the following criteria recognizes differences resulting from analytical variance and practical sampling limitations and assures substantial compliance.

"a) Analytical results of 4½ per cent added moisture in excess of that permitted—The inspector should require immediate action to reduce the moisture content of the products of the class represented by the sample. Product on hand represented by the sample should be brought into compliance.

"b) Analytical result of 2.1 per cent to 4.4 per cent added moisture in excess of that permitted—The inspector should carefully review all details of the moisture control routines. Changes in procedure need not be required immediately unless the review indicates that the added moisture has been increased due to changes in production procedures. Additional samples of product from

[Continued on page 32]



## Improvements at Denver Cudahy Run from Apron Drying to Batching

PLATFORM scale and dump bucket are moved as a unit down the track between trucks of sausage ingredients. The desired weights of these are added to the dump bucket until the end of the line at which point the bucket is hoisted and emptied.

**S**ausage manufacturing, hog killing and even apron sanitation received attention in a \$500,000 remodeling program at the Denver plant of The Cudahy Packing Co.

Streamlining the sausage department was made necessary by the successful development and promotion of a premium line of products—the "Bar-S"—in the Denver market. Not only was greater output required, but also an increase in product consistency was desired.

One interesting innovation adopted in the sausage department is a continuous system for batching raw materials. A bottom-drop stainless steel bucket is placed on a platform scale equipped with flanged wheels. The scale and bucket ride on rails for about 14 ft. down the center of the room. The track is flanked by sausage trucks containing the various raw materials. The proper weight of each ingredient is added to the bucket as the scale is stopped momentarily beside each truck.

Ribbon ice from two new stainless steel Scotsman ice machines is fed into the bucket near the end of the "run" and the bucket is then hoisted and dumped into the bowl cutter. It is estimated that the setup has reduced batching time 50 per cent.

Meat is transferred from the cutter to an emulsifying machine and flows from the latter unit into dump buckets to be moved to the stuffers.

Other sausage kitchen improvements include the addition of a stuffer, three peelers and a pre-packaging holding cooler in which finished product is stored on cages.

The apron-dryer installed as a part of new employee locker room facilities at the Denver plant is described as a forward step in good employee relations.

Like many other plants, Cudahy in the past has experienced difficulties from the practice of hanging aprons, unwashed, in locker rooms, closets, etc., where they are bound to become malodorous.

The site is a hallway leading to the new 400-locker employees change room and lunchroom. The apron-dryer consists of a multiple-coil heating unit, 10 ft. long by 5 ft. high, mounted on the wall of the corridor, and supplied by low-pressure waste steam from the plant boiler. A handy rod provides space for hanging aprons a foot or so away from the radiator, which is covered with mesh expanded metal.

Standard instructions to all employees are to make use of a large basin in the shower room to give their aprons a complete scrubbing at the end of the shift, using soap provided for the purpose, then to hang the apron for quick drying during the night. A posted rule prohibits the placing of wet aprons in any locker and points out the advantage of nightly cleaning and quick drying of both plastic and cloth-type aprons.



**LEFT:** Continuous stuffer is kept filled with bucket loads of material brought from the emulsifying machine. Skinless frankfurts are being stuffed and linked in this picture of one section of the sausage department at the Cudahy Denver plant. **RIGHT:** New apron dryer has eliminated one problem found in many meat plants.





## Progress on Plants Told At Rath Annual Meeting

Modernization and expansion projects started or completed in recent months by The Rath Packing Co. "will bear fruit in the years ahead," Howard H. Rath, chairman of the board, told the annual meeting of stockholders in the company's executive offices in Waterloo, Ia. The company's highly automated feed mill in Waterloo has begun production, Rath said, adding that the mill increases the "efficiency and capacity of our feed operations."



H. H. RATH

The chairman reported that construction is moving forward on a new hog slaughtering plant near Columbus Junction, Ia., with completion of the plant scheduled for mid-1961. It will be equipped to handle more than 1,000 hogs a day, with the carcasses to be shipped to the Waterloo plant for processing. The company's new meat processing and distributing plant in Houston, Tex., is due to begin operations next spring. Also scheduled for completion next spring is a \$750,000 modernization of hog slaughtering operations at the Waterloo plant. The project, explained Rath, will increase efficiency considerably and upgrade some of the resulting products.

Commenting on the hog supply outlook for next year, Rath said: "We are hopeful that total pork available in 1961 will be close to last year's level, on balance, but without the drastic fluctuations in hog marketings that occurred the past year." A large supply of cattle is anticipated, he continued, with larger beef slaughter in the months ahead considered likely. Slaughter of sheep and lamb also is expected to increase during the 1961 period.

## Livestock Feeders' Group To Convene Feb. 8-10

Packers and other representatives of the livestock-meat industry are invited to attend the annual meeting of the National Livestock Feeders Association on Wednesday through Friday, February 8-10, at the Sheraton-Fontenelle Hotel, Omaha, the group has announced.

The convention will open Wednesday afternoon with an industry conference devoted to open discussion of any subject pertaining to the

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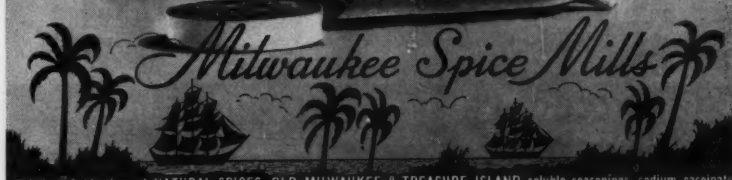
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livestock and meat business. Later sessions will include addresses on product improvement, marketing problems, feeding and nutrition, livestock chemicals and feed additives, merchandising, carcass improvement research and other topics.

### Truck Council Meeting To Stress Cutting Costs

"Cutting Costs Through Practical Controls" will be the theme of the 22nd annual convention of the Private Truck Council of America, Inc., at the Sheraton Hotel, Dallas, Tex., February 2-3, 1961, according to

James D. Mann, managing director of the organization.

A panel discussion will be devoted to gasoline turbine engines, automatic transmissions, multi-viscosity oils and multi-purpose greases, equipment and refrigeration in trailer design and tire development.

Other panels will discuss: "Overlooked Factors in Accident Costs," "Fuel Expenses—Driver Control," "Insurance—Reducing Costs and Increasing Safety," "Physical Distribution—Industry's Major Area for Cutting Costs" and "Piggyback and Containerization."

G. W. Hostetler, International

Harvester Co., will speak on "Advantages of Laboratory vs. Road Testing," and Charles V. Wootan, Texas Transportation Institute, Texas A & M College, will talk on "How to Determine Your Costs."

At its annual corporate meeting, which is held as part of the convention proceedings, the truck council's policy will be decided on such matters as highway building programs, increased gasoline taxes, ICC safety regulations affecting private truck operators and legislation.

### USDA Suspends 13 Dealers At National Stockyards, Ill.

Thirteen dealers at the St. Louis National Stock Yards, National Stockyards, Ill., have been ordered to cease and desist from buying and selling livestock at false weights, the U. S. Department of Agriculture has announced.

Registration of each of these dealers under the Packers and Stockyards Act has been suspended for varying periods, as follows: Rolla Silvey, 10 days; Charles Furmanek, 30 days; John Grewe (doing business as Atlas Calf Co.), 15 days; James Louvier, 20 days; George E. McBride, 30 days; Ellsworth M. Sharp and John W. Glenville (doing business as Sharp & Glenville), 20 days.

Also, Lillian Sundheimer and Malcolm Roche (doing business as Sundheimer Roche & Co.), 30 days; J. N. Simcock and W. J. Herzog (doing business as Simcock & Son), 20 days; Bernard J. Cristel, 10 days; John C. Sanford (doing business as Jack Sanford), 20 days; Paul Coyne, 40 days; Clyde W. Long, 60 days, and John Brombolich, 60 days.

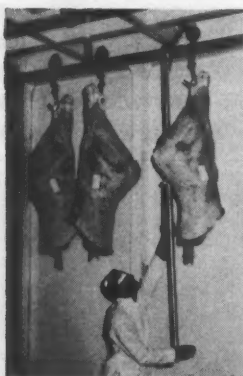
Each of these dealers also was ordered to cease and desist from "knowingly making, or causing to be made, false entries in the accounts, records and memoranda kept by him as a dealer under the Act." Each further was ordered henceforth to "keep accounts, records and memoranda which will fully and correctly disclose all transactions involved in his business as a dealer under the Act."

In addition, six of the dealers were ordered to cease and desist from other practices in violation of the Packers and Stockyards Act.

Copies of the "Decision and Order" on each of the 13 cases—P&S Docket Nos. 2262, 2263, 2265, 2290 through 2297, 2303, and 2307—may be obtained from the Packers and Stockyards Division, Agricultural Marketing Service, U. S. Department of Agriculture, Washington 25.

## NEW! Autopike\* CARCASS HANDLER

- SAVE TIME ● SAVE LABOR ● SAVE MONEY
- AND SOLVE ONE OF YOUR BIGGEST PROBLEMS



1. Hook Autopike on rail and lift off trolley

with The Amazing NEW Autopike Carcass Handler. The Autopike Is an Automatic Pike Pole That Enables One Man ...

Single Handed ... To Remove Product from High Rail!



2. Lower load using brake



3. Autopike stands fast while load is removed

- One Man Operation
- Light, Portable
- Completely Safe
- Fast, Simple Operation
- Absolutely No Maintenance
- Easily Removes One Quarter from the Middle of a Full Rail

ONLY  
**\$129.50**  
Order Now

\*Pat. Pend.

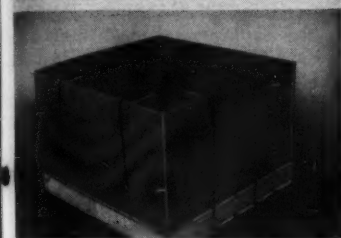
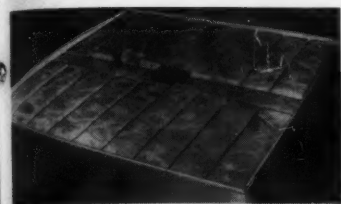
**PADCO**  
PRODUCTS

**PACKERS DEVELOPMENT CO.** Rochester, New Hampshire

Manufacturers of Autoflay Skinning Machines & Smallwood System Conveyors.  
Canadian Distributors — C. A. PEMBERTON & CO., LTD., TORONTO, CANADA

## Container Cuts Handling Costs on Loaf-Style Ham

Reduced material handling costs and increased product protection have been achieved by Rose Packing Co., Inc., Chicago, through adop-



TWO views of container that holds 800 lbs. of loaf-style boiled ham.

tion of a corrugated bulk container for shipping loaf-style boiled ham. Designed and produced by Stone

Container Corp., Chicago, the new container holds 800 lbs. of boiled ham as compared with 50-lb. lots in the type of boxes previously employed, according to William Rose, jr., vice president.

Because of the weight involved with each container, every box must be handled with mechanical devices, resulting in a reduction of product damage that frequently occurs with manual handling of the smaller sizes of containers.

In addition to the protective qualities of bulk handling the 100 8-lb. pieces of boiled ham, the container reduces material handling costs both for Rose Packing and its customers, Rose says. The light tare weight of corrugated also provides for shipping cost savings.

## Meat Board Schools Are 'Really Cooking' on High

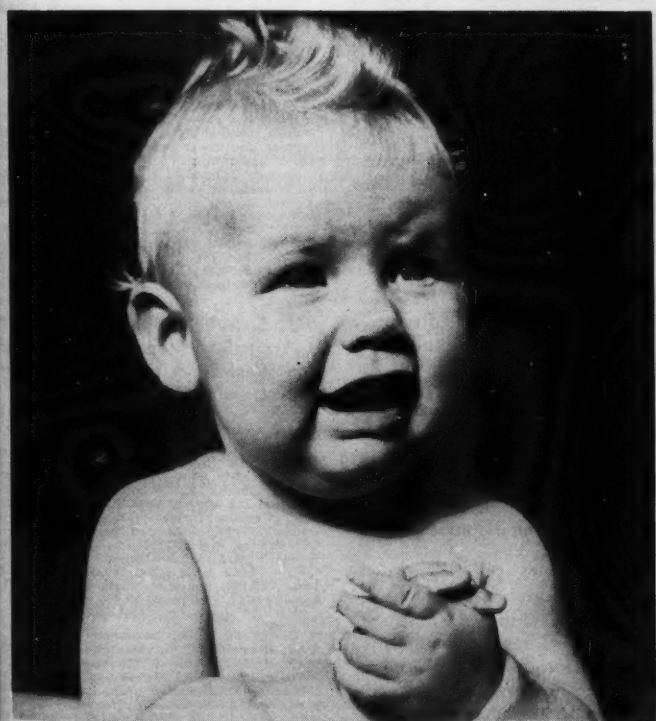
A new record in the number of four-day cooking schools conducted by the National Live Stock and Meat Board is expected to be set in 1960-61. Indications are that more than 75 cooking schools will be held in 30 states during the season, the Meat Board announced. The annual program began in September.

The Board's field staff of home economists will take this year's edition, "Fantasy of Foods," to approximately 300,000 homemakers. The schools, held from September through May, have played an important part in meat education for nearly 30 years. They are sponsored by newspapers and radio stations in the cities where they are conducted.

The latest facts on meat selection, preparation, cookery techniques and kitchen equipment are included in the cooking school program. Each person attending the program receives a colorful "Fantasy of Foods" recipe book, which includes all the school's specialties from "ham turnovers" to "fireside doughnuts." Meat charts of wholesale and retail cuts, cooking time tables, meat carving illustrations and methods of meat cookery also are given.

## Annual Packaging Forum

Twelve separate seminars covering a wide variety of packaging subjects and the presentation of annual awards will be highlights of the 23rd annual National Packaging Forum of the Packaging Institute scheduled for October 18-20, 1961, at the Biltmore Hotel, New York City.



"... and, please, to all our good friends bring a Happy & Prosperous 1961."

## Asmus Brothers

import only select, choice

Spanish stuffed olives

in the correct quality and

size for your Olive Loaf!



**Asmus Brothers, Inc.**

Spice Importers and Grinders

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# ALL MEAT . . . output, exports, imports, stocks

## Meat Production Down, But Above Last Year

Meat production under federal inspection for the week ended December 24, with the impending holiday tending to slow operations, declined moderately to 420,000,000 lbs. from 427,000,000 lbs. in the previous week. However, with the holiday falling on a working day last year, production for that period amounted to 340,000,000 lbs., or about 24 per cent below last week's volume. Slaughter of all livestock, except hogs, was down and in all instances larger than for the same period of 1959. The traditional peak hog slaughter season is at hand which tended to add to kill last week. Estimated slaughter and meat production by classes for the three periods appear below as follows:

Week Ended	BEEF		PORK (Excl. lard)	
	Number	Production	Number	Production
	M's	Mil. lbs.	M's	Mil. lbs.
Dec. 24, 1960	355	213.4	1,330	184.2
Dec. 17, 1960	375	223.1	1,390	180.1
Dec. 26, 1959	263	160.3	1,187	162.9

Week Ended	VEAL		LAMB AND MUTTON		TOTAL MEAT PROD.
	Number	Production	Number	Production	
	M's	Mil. lbs.	M's	Mil. lbs.	Mil. lbs.
Dec. 24, 1960	105	11.3	235	11.3	420
Dec. 17, 1960	115	12.5	240	11.5	427
Dec. 26, 1959	72	8.0	175	8.5	340

1960-60 HIGH WEEK'S KILL: Cattle, 462,118; Hogs, 1,859,215; Calves, 200,555; Sheep and Lambs, 369,561.  
1959-60 LOW WEEK'S KILL: Cattle, 154,814; Hogs, 641,000; Calves, 55,241; Sheep and Lambs, 137,677.

AVERAGE WEIGHT AND YIELD (LBS.)					
Week Ended	CATTLE		HOGS		
	Live	Dressed	Live	Dressed	
Dec. 24, 1960	1,045	601	243	138	
Dec. 17, 1960	1,035	595	245	140	
Dec. 26, 1959	1,062	610	241	137	

Week Ended	CALVES		SHEEP AND LAMBS		LARD PROD.
	Live	Dressed	Live	Dressed	
					Per cwt. lbs.
Dec. 24, 1960	195	108	100	48	41.0
Dec. 17, 1960	195	109	100	48	39.8
Dec. 26, 1959	197	111	101	49	45.9

## Liquid Nitrogen Refrigerant Successful In USDA Tests

Liquid nitrogen was recognized as an excellent means of preserving food more than a hundred years ago. But until recently it was thought to be too expensive for general use, even in today's fleets of trucks, railroad cars or ships. Now, a system using the refrigerant has been developed that seems promising for trucks delivering frozen foods to retail stores, according to a report issued by the U.S. Department of Agriculture.

The new system sprays liquid nitrogen at a temperature of  $-320^{\circ}$  F. directly onto the cargo in the truck. By replacing warm air in the truck with cold, dry nitrogen, instead of gradually cooling the air, the system virtually eliminates the time required by conventional methods to pull the air temperature down low enough for frozen foods.

The test was conducted by researchers in the Agricultural Marketing Service with the assistance of the company that developed the

system. The system was installed in one of the trucks of a frozen food distributor, and the delivery runs of the truck on five days were observed during the test.

## New Zealand Arranging For Air Meat Shipments To U. S.

The New Zealand Meat Producers' Board has arranged to make trial shipments of meat by air to Hawaii and North America, the Foreign Agricultural Service has revealed. Initial shipments are expected early in 1961. The importance of air shipments is that reduced transportation time will allow meat to be moved the long distance chilled rather than frozen.

Last year the N. Z. government amended the meat export control act to authorize shipment of meat by air. The board has been studying the economic feasibility of shipping meat by air. The carefully planned, small experimental shipments will provide factual information as to cost and condition of meat on arrival at its destination.

## U. S. MEAT EXPORTS

The U.S. Department of Agriculture report on meat exports in October showed continuing decline in volume of movement of some fat items. U. S. exports of inedible tallow, which have run considerably above last year, were down from such exports in October, 1959. The October, 1960, outward movement of inedible tallow at 131,465,358 lbs. represented about a 6,000,000-lb. decrease from 137,364,857 lbs. exported in the same month last year. Exports of lard fell to 57,920,318 from 67,844,978 lbs. a year ago.

U. S. exports of meat and meat products in October, 1960-59, are listed below as follows:

Commodity	Pounds Oct. 1960	Pounds Oct. 1959
EXPORTS (Domestic)—		
Beef and veal—		
Fresh or frozen (except canned) . . .	877,169	674,380
Pickled or cured (except canned) . . .	1,769,750	2,261,230
Pork—		
Fresh or frozen (except canned) . . .	2,971,223	1,502,481
Hams and shoulders, cured or cooked . . .	1,454,704	2,047,155
Bacon . . .	333,268	1,937,876
Pork, pickled, salted or otherwise cured . . .	1,287,521	1,003,144
Sausage, bologna & frankfurters except canned . . .	130,101	201,850
Meat and meat products (except canned) . . .	233,423	6,301
Beef and pork livers, fresh or frozen . . .	5,510,805	5,068,400
Beef tongues, fresh or frozen . . .	1,925,070	1,041,370
Variety meats (except canned) . . .	2,815,151	1,555,813
Meat specialties, frozen . . .	466,473	574,301
Canned meats—		
Beef and veal . . .	230,046	445,860
Sausage, bologna and frankfurters . . .	131,348	102,350
Hams and shoulders . . .	30,281	61,086
Pork, canned . . .	274,880	343,821
Meat and meat products (except canned) . . .	97,024	50,360
Lard (includes rendered pork fat) . . .	57,920,318	67,844,978
Shortenings, animal fat (excl. lard) . . .	50,160	120,000
Tallow, edible . . .	1,276,878	1,811,204
Tallow, inedible . . .	131,465,358	137,364,857
Inedible animal oils . . .	84,212	313,433
Inedible animal fats . . .	14,018,195	11,079,100

## U. S. WEEKLY MEAT IMPORTS

Arrivals of foreign meat at East and West coast ports were reported in lbs. as follows:

NEW YORK, BOSTON, PHILADELPHIA  
Weeks ended November 25, December 2, 9 and 16, 1960

From Australia—31,797 carcass lamb and cuts, 1,869,040 beef forequarters, 526,741 boneless beef and 1,811,235 boneless mutton. Argentina—114,732 canned beef. Brazil—59,570 canned beef. Canada—76,000 carcass beef and veal. Denmark—384,765 canned pork. Germany—16,690 canned pork. Ireland—3,522,343 boneless beef. Holland—512,499 canned pork. New Zealand—284,016 lamb cuts, 687,044 boneless beef and, 483,788 boneless veal. Paraguay—76,498 canned beef. Uruguay—19,446 canned beef.

## WEST COAST PORTS

Week ended December 16, 1960

Los Angeles: From Mexico—40,000 boneless beef. New Zealand—55,980 boneless beef, 33,549 boneless veal. Uruguay—7,031 canned beef. Holland—46,041 canned pork. Italy—210 canned pork, and 2,574 sausage. Norway—960 miscellaneous meats. Argentina—54,600 canned boneless meats and 10,134 sausage.  
Portland: Australia—105,210 frozen beef. Canada—36,000 frozen beef melts and lungs. Denmark—7,435 cooked ham.

# PROCESSED MEATS . . . SUPPLIES

## AMI PROVISION STOCKS

Provision stocks as reported to the American Meat Institute totaled 104,200,000 lbs. on December 17. This volume was 30 per cent below the 149,100,000 lbs. a year earlier.

Stocks of lard and rendered pork fat totaled 45,100,000 lbs., or 22 per cent below the 57,700,000 lbs. in stock about a year earlier.

The accompanying table shows stocks in million pounds and how they compared percentage-wise with holdings two weeks previously and a year earlier.

	Dec. 17 1960	Dec. 3 1960	Dec. 19 1959
<b>Proven Pork:</b>	<b>Stocks</b>	<b>Pct.</b>	<b>Pct.</b>
Pork chops	3.2	133	82
Hams	10.3	60	75
Belies	17.0	147	49
Loins	2.7	113	73
Butts	1.6	145	47
Spareribs	4.3	119	74
Trimming	7.0	119	58
Livers	3.3	118	50
Other pork	16.8	122	86
Total proven pork	68.5	110	65
<b>Pork-cured, in cure:</b>			
D.S. bellies	7.6	133	72
Pai Backs	4.8	112	117
Hams, S.P.-D.C.	11.0	91	72
Pork, S.P.-D.C.	1.6	100	84
Belies, S.P.-D.C.	7.6	110	83
Other cured, in cure	3.1	119	103
<b>In Cure</b>	<b>35.7</b>	<b>108</b>	<b>81</b>
Total pork prod.	104.2	109	70
Lard and RPF	45.1	127	78

## United Kingdom Stops Pork Imports From S. America

The United Kingdom is banning imports of pork and pork variety meats from Argentina, Chile, Uruguay and Brazil because of recent outbreaks of foot-and-mouth dis-

ease in the United Kingdom. The ban becomes effective February 1.

Argentina may increase shipments of variety meats to other European countries that are large markets for United States meat products. U.S. pork variety meats are not being shipped to the U.K. because of sanitary controls against hog cholera. U.S. carcass pork is not shipped either, because of sanitary controls and also relatively low U.K. prices.

The U.K. imported 10,600,000 lbs. of pork and pork variety meats from Argentina in 1959. There were no significant shipments from Uruguay or Brazil. Chile normally does not export pork or pork products.

## International Poland China Has Loineye Of 7.13 Sq. In.

The champion Poland China barrow of the International Livestock Exposition had a loineye area of 7.13 sq. in., the Patrick Cudahy Packing Co. has revealed.

Shown by Oscar W. Anderson & Sons of Leland, Ill., the barrow had a pork carcass length of 31.2 in. and 1.20 in. of backfat. The barrow dressed 42.9 per cent of its live weight in lean cuts compared with the average of the standard hog at about 33 per cent. It yielded 47 lbs. of ham, 31 lbs. of loin, 18.5 lbs. of picnic and 13 lbs. of Boston butt.

It was the second year in succession the champion Poland china of

the show cut better than seven square inches of loineye muscle. Last year's champion barrow had a loineye area of 7.03 sq. in.

The grand champion pork carcass of the show had a loineye area of only 5.76 sq. in., small by comparison. It was from a cross-breed.

## Plans To End Retention Tax

The Argentina government is contemplating removal of the 10 per cent retention tax on meat exports in order to stimulate outshipments. The tax on variety meats will most likely be removed first then that on carcass meats. Final decisions have not been made because elimination of the retentions will increase domestic prices. Argentine exports of variety meats compete with such U.S. exports to Western Europe.

## CALIFORNIA STATE INSPECTED SLAUGHTER

State inspected slaughter of livestock in California, November, 1960-59, as reported to THE PROVISIONER:

	November 1960	1959
Cattle, head	37,896	29,355
Calves, head	18,859	14,408
Hogs, head	15,337	16,516
Sheep, head	43,709	33,946

Meat and lard production for November, 1960-59 (in lbs.), were:

Sausage	8,926,927	7,359,333
Pork and beef	11,892,334	9,009,563
Lard, substitutes	1,471,426	927,159
Totals	22,290,687	17,296,055

As of November 30, 1960, California had 125 meat inspectors. Plants under state inspection totaled 366 and plants under state approved municipal inspection numbered 50.

## DOMESTIC SAUSAGE

Pork sausage, bulk (f.o.b. Chgo.)	
1-lb. roll	32 @ 37
Pork saus., sheep cas.,	
1-lb. package	55 @ 61
Pork, sheep casing,	
1-lb. package	61 @ 68
Pork, sheep casing,	
6-oz. ring, bulk	46 1/2 @ 56
Boleaga, a.c., bulk	38 @ 41
Smoked liver, a.c., bulk	36 @ 45
Polish sausage, a.c.,	
service pack	61 @ 72
Smoked liver, n.c., bulk	52 @ 57
New Eng. lunch spec.	63 @ 69
Olve loaf, bulk	47 1/2 @ 53
Head and tongue, n.c.	49 1/2 @ 69
Head, tongue, a.c.	45 1/2 @ 66 1/2
Pepper loaf, bulk	50 1/2 @ 67
Pork & pimento loaf	44 1/2 @ 53
Boleaga, a.c., sliced (delv'd)	
6-oz. pack, doz.	2.65 @ 3.60
New Eng. lunch spec.,	
sliced, 6, 7-oz., doz.	4.05 @ 4.52
Olve loaf,	
sliced, 6, 7-oz., doz.	3.00 @ 3.84
P.P. sliced, 6-oz., doz.	2.85 @ 4.80
Flap loaf, sliced,	
6, 7-oz., dozen	2.85 @ 3.60

## DRY SAUSAGE

(Head, 6-oz. pack, f.o.b., Chgo.)	
Corralat, hog bungs	1.04 @ 1.06
Traminger	60 @ 62
Traminger	87 @ 89
Traminger	84 @ 86
Traminger	96 @ 98
Traminger, B.C.	1.08 @ 1.10
Traminger, Genoa style	1.08 @ 1.10
Traminger, cooked	51 @ 53
Traminger	87 @ 89
Traminger	99 @ 1.01
Traminger	88 @ 90
Traminger	60 @ 62

## CHGO. WHOLESALE SMOKED MEATS

Wednesday, Dec. 28, 1960	
Hams, to-be-cooked, (av.)	
14/16, wrapped	52
Hams, fully cooked,	
14/16, wrapped	53
Hams, to-be-cooked,	
16/18, wrapped	50
Hams, fully cooked,	
16/18, wrapped	51
Bacon, fancy, de-rind,	
8/10 lbs., wrapped	45
Bacon, fancy sq. cut, seed-	
less, 10/12 lbs., wrapped	42
Bacon, No. 1, sliced 1-lb.	
head seal, self-service, pkg.	53

## SPICES

(Basis Chicago, original barrels, bags, bales)	
Whole Ground	
Allspice, prime	86
resifted	99
Chili pepper	58
Chili powder	58
Cloves, Zanzibar	60
Ginger, Jamaica	45
Mace, fancy Banda	3.50
East Indies	2.90
Mustard flour, fancy	43
No. 1	38
West Indies nutmeg	1.80
Paprika, American,	
No. 1	55
Paprika, Spanish,	
No. 1	60
Cayenne pepper	83
Pepper:	
Red, No. 1	58
Black	65
White	87

## SAUSAGE CASINGS

(Lel prices quoted to manufacturers of sausage)

Beef rounds:	(Per set)
Clear, 29/35 mm.	1.35 @ 1.55
Clear, 35/38 mm.	1.35 @ 1.55
Clear, 35/40 mm.	1.20 @ 1.45
Clear, 38/40 mm.	1.30 @ 1.65
Not clear, 40 mm./up	95 @ 1.00
Not clear, 40 mm./dn	80 @ 85
Beef weasands:	(Each)
No. 1, 24 in./up	15 @ 18
No. 1, 22 in./up	16 @ 18
Beef middles:	(Per set)
Ex. wide, 2 1/2 in./up	3.75 @ 3.85
Spec. wide, 2 1/2 in.	2.75 @ 2.90
Spec. med. 1 1/2 in.	1.85 @ 1.95
Narrow, 1 1/2 in./dn	1.15 @ 1.20
Beef bung caps:	(Each)
Clear, 5 in./up	42 @ 46
Clear, 4 1/2 in.	34 @ 38
Clear, 4 1/4 in.	21 @ 23
Clear, 3 1/4 in.	18 @ 17
Beef bladders, salted:	(Each)
7 1/2 inch/up, inflated	23
6 1/2-7 1/2 inch, inflated	15
5 1/2-6 1/2 inch, inflated	15
Pork casings:	(Per hank)
29 mm./down	4.75 @ 5.10
29/32 mm.	4.75 @ 5.00
32/35 mm.	3.25 @ 3.75
35/38 mm.	2.60 @ 3.75
38/42 mm.	2.45 @ 3.10
Hog bungs:	(Each)
Sow, 24 inch cut	64 @ 66
Export, 34 in. cut	59 @ 61
Large prime, 34 in.	44 @ 46
Med. prime, 34 in.	32 @ 34
Small prime, 34 in.	16 @ 19
Middles, cap off	72 @ 74
Skip bungs	11 @ 12

Sheep casings:	(Per hank)
26/28 mm.	5.35 @ 5.45
24/26 mm.	5.25 @ 5.35
22/24 mm.	4.15 @ 4.35
20/22 mm.	3.65 @ 3.75
18/20 mm.	2.70 @ 2.80
16/18 mm.	1.35 @ 1.45

## CURING MATERIALS

Nitrite of soda, in 400-lb. (Cwt.)	
bbles, del. or f.o.b. Chgo.	\$11.96
Pure refined gran. nitrate	
of soda, f.o.b. N.Y.	5.95
Pure refined powdered nitrate	
of soda, f.o.b. N.Y.	10.95
Salt, paper-sacked, f.o.b.	
Chgo. gran. carlots, ton	30.50
Rock salt in 100-lb.	
bags, f.o.b. whse., Chgo.	28.50
Sugar:	
f.o.b. spot, N.Y.	6.45
Refined standard cane	
gran., delv'd. Chgo.	9.467
Packers curing sugar, 100-	
lb. bags, f.o.b. Reserve,	
La., less 2%	8.80
Dextrose, regular:	
Carlose, (carlots, cwt.)	7.62
Ex-warehouse, Chicago	7.77

## SEEDS AND HERBS

(Lel., lb.)	Whole Ground
Caraway seed	30
Cominos seed	39
Mustard seed	
fancy	30
yellow Amer.	20
Oregano	37
Coriander,	
Morocco, No. 1	33
Marjoram, French	54
Sage, Dalmatian,	
No. 1	59

# FRESH MEATS... Chicago and outside

## CHICAGO

Dec. 27, 1960

### CARCASS BEEF

Steers, gen. range: (carlots, lb.)	
Choice, 500/600	43
Choice, 600/700	43
Choice, 700/800	42
Good, 500/600	40n
Good, 600/700	40n
Bull	33
Commercial cow	29 @ 30
Canner-cutter cow	24½

### PRIMAL BEEF CUTS

Prime:	(lb.)
Pr. loins, 50/70 (cl.)	75 @ 50½
Sq. chux, 70/90	38½ @ 40n
Armchux, 80/110	36 @ 37
Ribs, 25/35 (cl.)	65 @ 68
Briskets, (cl.)	30 @ 30½
Navel, No. 1	16½ @ 17½
Flanks, rough No. 1	16½
Choice:	
Hindqtrs, 5/700	50 @ 50½
Foreqtrs, 5/800	36½
Rounds, 70/90 (cl.)	51 @ 51½
Tr. loins, 50/70 (cl.)	67 @ 75
Sq. chux, 70/90	38½ @ 40n
Armchux, 80/110	36 @ 37
Ribs, 25/30 (cl.)	64 @ 65
Ribs, 30/35 (cl.)	64 @ 65
Briskets, (cl.)	30 @ 30½
Navel, No. 1	16½ @ 17½
Flanks, rough No. 1	16½
Good (all wts):	
Rounds	48½ @ 50
Sq. chucks	38 @ 39
Briskets	29 @ 30
Ribs	56 @ 58
Loins, trim'd.	61 @ 64

### COW, BULL TENDERLOINS

C&C grade, fresh (Job lots, lb.)	
Cow, 3 lbs./down	60 @ 65
Cow, 3/4 lbs.	65 @ 78
Cow, 4/5 lbs.	72 @ 78
Cow, 5 lbs./up	88 @ 95
Bull, 5 lbs./up	88 @ 95

### CARCASS LAMB

Prime, 35/45 lbs.	(cl., lb.)
Prime, 35/45 lbs.	38 @ 40
Prime, 45/55 lbs.	37 @ 40
Choice, 35/45 lbs.	35 @ 38
Choice, 45/55 lbs.	38 @ 40
Choice, 55/65 lbs.	37 @ 40
Good, all wts.	34 @ 38½

## PACIFIC COAST WHOLESALE MEAT PRICES

	Los Angeles	San Francisco	No. Portland
FRESH BEEF (Carcass)	Dec. 27	Dec. 27	Dec. 27
Choice, 5-600 lbs.	\$41.50 @ 43.00	\$40.50 @ 43.00	\$41.50 @ 44.00
Choice, 6-700 lbs.	40.75 @ 42.00	40.00 @ 41.00	41.00 @ 43.00
Good, 5-600 lbs.	39.00 @ 41.00	39.00 @ 40.00	40.00 @ 42.50
Good, 6-700 lbs.	37.50 @ 39.50	39.00 @ 40.00	39.00 @ 41.50
Stand., 3-600 lbs.	37.00 @ 39.00	38.00 @ 40.00	36.50 @ 39.00
COW:			
Commercial, all wts.	32.00 @ 34.00	32.00 @ 34.00	33.50 @ 37.00
Utility, all wts.	31.00 @ 33.00	29.00 @ 32.00	32.00 @ 35.00
Canner-cutter	29.00 @ 31.00	27.00 @ 29.00	29.00 @ 32.00
Bull, util. & com'l.	36.00 @ 40.00	38.00 @ 40.00	36.50 @ 39.00
FRESH CALF:			
Choice, 200 lbs./down	50.00 @ 52.00	None quoted	40.00 @ 46.00
Good, 200 lbs./down	47.00 @ 50.00	42.00 @ 46.00	38.50 @ 44.00
LAMB (Carcass):			
Prime, 45-55 lbs.	40.00 @ 42.00	38.00 @ 41.00	36.00 @ 39.00
Prime, 55-65 lbs.	37.00 @ 40.00	36.00 @ 39.00	None quoted
Choice, 45-55 lbs.	38.00 @ 41.00	36.00 @ 39.00	36.00 @ 39.00
Choice, 55-65 lbs.	37.00 @ 40.00	36.00 @ 39.00	36.00 @ 39.00
Good, all wts.	36.00 @ 40.00	36.00 @ 39.00	34.00 @ 37.00
FRESH PORK: (Carcass)	(Packer style)	(Packer style)	(Packer style)
135-175 lbs. U.S. No. 1-3	None quoted	None quoted	30.00 @ 32.00
LOINS:			
8-12 lbs.	46.00 @ 49.00	48.00 @ 52.00	45.00 @ 50.00
12-16 lbs.	46.00 @ 49.00	45.00 @ 49.00	46.00 @ 50.00
PICNICS:	(Smoked)	(Smoked)	(Smoked)
4-8 lbs.	31.00 @ 35.00	31.00 @ 34.00	31.50 @ 37.00
HAMS:			
12-16 lbs.	47.00 @ 57.00	52.00 @ 56.00	52.00 @ 57.00
16-30 lbs.	43.00 @ 55.00	49.00 @ 52.00	51.00 @ 55.00

## NEW YORK

Dec. 28, 1960

### CARCASS BEEF AND CUTS

Prime steer:	(cl., lb.)
Hinds, 6/700	54 @ 60
Hinds, 7/800	53½ @ 59
Rounds, cut across,	
flank off	53½ @ 59
Rds., dia. bone, f.o.b.	54 @ 59
Short loins, untrim.	77 @ 90
Short loins, trim.	105 @ 139
Flanks	17 @ 21
Ribs	64 @ 72
Arm chucks	38½ @ 43
Briskets	34 @ 40
Plates	17½ @ 23
Choice steer:	
Carcass, 6/700	45 @ 47
Carcass, 7/800	44½ @ 46
Carcass, 8/900	44 @ 45
Hinds, 6/700	53 @ 57½
Hinds, 7/800	52 @ 57
Rounds, cut across,	
flank off	53 @ 58
Rds., dia. bone, f.o.	54 @ 58
Short loins, untrim.	62 @ 70
Short loins, trim.	82 @ 104
Flanks	17 @ 21
Ribs	62 @ 66
Arm chucks	38 @ 42
Briskets	33 @ 39
Plates	17 @ 22
Good steer:	
Carcass, 5/600	42 @ 43½
Carcass, 6/700	42½ @ 44½
Hinds, 6/700	50 @ 55
Hinds, 7/800	50 @ 55
Rounds, cut across,	
flank off	52 @ 57
Rds., dia. bone, f.o.	53 @ 57
Short loins, untrim.	55 @ 60
Short loins, trim.	73 @ 80
Flanks	17 @ 21
Ribs	57 @ 61
Arm chucks	37½ @ 40

### FANCY MEATS

(Cl., lb.)	
Veal breads, 6/12-oz	57 @ 61
12-oz./up	56 @ 60
Beef livers, selected	50 @ 55
Beef kidneys	48 @ 54
Oxtails, ¼-lb., frozen	41 @ 45

### VEAL SKIN-OFF

(Carcass prices, lcl., lb.)	
Prime, 90/120	57 @ 61
Prime, 120/150	56 @ 60
Choice, 90/120	50 @ 55
Choice, 120/150	48 @ 54
Good, 60/90	41 @ 45
Good, 90/120	43 @ 47
Good, 120/150	41 @ 45
Choice calf, all wts.	40 @ 42
Good calf, all wts.	39 @ 42

### CARCASS LAMB

(Carcass, lb.)	
Prime, 35/45	38 @ 44
Prime, 45/55	37 @ 43
Prime, 55/65	36½ @ 41
Choice, 35/45	38 @ 44
Choice, 45/55	37 @ 42
Choice, 55/65	36 @ 40
Good, 35/45	36 @ 42
Good, 45/55	36 @ 41
Good, 55/65	34 @ 43
(Carcass, lb.)	
Choice, 35/45	36 @ 43
Choice, 45/55	35 @ 40
Choice, 55/65	34 @ 38

### CARCASS BEEF

(Carcass, lb.)	
Steer, choice, 6/700	44 @ 48½
Steer, choice, 7/800	44 @ 48½
Steer, choice, 8/900	43 @ 48½
Steer, good, 6/700	41½ @ 43
Steer, good, 7/800	41½ @ 43
Steer, good, 8/900	40 @ 41

## PHILA. FRESH MEATS

Dec. 27, 1960

PRIME STEER:	(cl., lb.)
Carcass, 5/700	47 @ 48½
Carcass, 7/900	45½ @ 48
Rounds, flank off	55 @ 57
Loins, full, untr.	56 @ 60
Loins, full, trim.	none qtd.
Ribs, 7-bone	70 @ 74
Armchux, 5-bone	39 @ 41
Briskets, 5-bone	32 @ 36
CHOICE STEER:	
Carcass, 5/700	46 @ 47½
Carcass, 7/900	44 @ 46½
Rounds, flank off	54 @ 56
Loins, full, untr.	52 @ 54
Loins, full, trim.	68 @ 70
Ribs, 7-bone	63 @ 66
Armchux, 5-bone	39 @ 41
Briskets, 5-bone	32 @ 36
COW CARCASS:	
Comm'l., 350/700	30 @ 33
Utility 350/700	30 @ 32½
Can-cut 350/700	29 @ 32
VEAL CARC.: Choice	Good
60/90 lbs.	None @ 47
90/120 lbs.	51 @ 55
120/150 lbs.	51 @ 55
LAMB CARC.: Ch. & Pr.	Good
35/45 lbs.	39 @ 42
45/55 lbs.	38 @ 41
55/65 lbs.	36 @ 39

## Phila., N. Y. Fresh Pork

PHILADELPHIA:	(cl., lb.)
Loins, reg. 8/12	45 @ 48
Loins, reg. 12/16	44 @ 47
Boston Butts 4/8	37 @ 39
Spareribs, 3-lb./dn	none qtd.
Hams, sknd., 12/14	46 @ 48
Picnics, S. 4/6	26 @ 28
Picnics, S. 6/8	24½ @ 26
Bellies, 10/14	26 @ 28
NEW YORK:	(cl., lb.)
Loins, reg. 8/12	45 @ 48
Loins, reg. 12/16	44 @ 47
Hams, sknd., 12/14	46 @ 48
Boston butts, 4/8	38 @ 40
Spareribs, 3 lb./dn	37 @ 40
CHGO. FRESH PORK AND PORK PRODUCTS	Dec. 27, 1960
Hams, skinned, 12/14	46
Hams, skinned, 14/16	46
Picnics, 4/6 lbs.	25½
Picnics, 6/8 lbs.	24½
Pork loins, boneless	60
Shoulders, 16/dn.	30
(Job lots, lb.)	
Pork livers	10 @ 19
Tenderloins, fresh, 10's	72 @ 75
Neck bones, bbls.	9 @ 10
Feet, s.c., bbls.	9 @ 10

## OMAHA, DENVER MEATS

(Carcass carlots, cwt.)	
Omaha, Dec. 28, 1960	
Choice steer, 6/700	\$42.25
Choice steer, 7/800	40.75 @ 41.25
Choice steer, 8/900	39.75 @ 40.25
Good steer, 6/800	39.75 @ 40.25
Choice heifer, 5/700	40.25 @ 40.75
Good heifer, 5/700	38.00 @ 38.50
Cow, e-c & util.	28.00 @ 28.00
Pork loins, 8/12	42.00 @ 43.00
Pork butts, 4/8 (12-27)	33.50
Hams, sknd., 12/16	41.00 @ 43.00
Denver, Dec. 28, 1960	
Choice steer, 6/700	42.00 @ 42.50
Choice steer, 7/800	41.00 @ 41.50
Choice steer, 8/900	41.00
Good steer, 6/800	41.00
Choice heifer 5/700	40.25 @ 40.75

## CHGO. PORK SAUSAGE MATERIALS—FRESH

Pork trimmings: (Job lots)	
40% lean, barrels	17
50% lean, barrels	19
80% lean, barrels	31
95% lean, barrels	39
Pork head meat	29
Pork cheek meat	
trimmed, barrels	32½
Pork cheek meat, untrimmed	30½



# PORK AND LARD... Chicago and outside

## CHICAGO PROVISION MARKETS

From the National Provisioner Daily Market Service

### CASH PRICES

(Carlott basis, Chicago price zone, Dec. 28, 1960)

SKINNED HAMS			SELLIES		
F.F.A. or fresh	Frozen		F.F.A. or fresh	Frozen	
10/12	47 1/2		6/8	32 1/4	
12/14	43 1/4		8/10	33 1/2	
14/16	40		10/12	28 1/2	
16/18	38 1/2		12/14	28 1/2 @ 29	
18/20	36 1/2		26 1/2 @ 27	14/16	26 1/2
20/22	35 1/2		25 1/4	16/18	25 1/4
22/24	35		23 1/2	18/20	23 1/2
24/26	35n				
25/30	33				
25/30	31 1/2				

### PICNICS

F.F.A. or fresh	Frozen
4/6	24 1/2
6/8	23 1/2
8/10	21n
10/12	21n
F.F.A. 8/10 2 1/2 in	20 1/2
fresh 8/10 2 1/2 in	n.q.

### FRESH PORK CUTS

Job Lot	Car Lot
Loins, 12/dn	43 1/2
Loins, 12/16	40 1/2
Loins, 16/20	35
Butts, 20/up	30
Butts, 4/8	34 1/2
Butts, 8/12	29
Butts, 8/up	29
Ribs, 3/dn	35 1/2
Ribs, 3/5	26 1/2
Ribs, 5/up	22

asked, b-bid, n-nominal

### FAT BACKS

Frozen or fresh	Cured
7 1/2n	9n
7 1/2n	9
10 1/2n	11 1/2n
11n	12 1/4
12n	14 1/6
13n	16 1/8
13n	18 20
13n	20 25

### OTHER CELLAR CUTS

Frozen or fresh	Cured
14 1/2	Sq. Jowls, boxed n.q.
11 1/2	Jowl Butts, loose 12 1/2a
12	Jowl Butts, boxed n.q.

## LARD FUTURES PRICES

(Drum contract basis)

FRIDAY, DEC. 23, 1960

Open	High	Low	Close
Jan. 10.60	10.60	10.60	10.50b
Mar. 10.60	10.60	10.60	10.60
May 10.70	10.80	10.77	10.80a
July 10.70	10.70	10.70	10.70

Sales: 440,000 lbs.  
Open interest at close, Thurs., Dec. 22: Dec., 49; Jan., 134; Mar., 24 1/2; May, 83, and July, 4 lots.

MONDAY, DEC. 26, 1960

Holiday, Board of Trade closed  
No trading in lard futures

TUESDAY, DEC. 27, 1960

Jan.	10.52	10.52	10.52	10.52
Mar.	10.65	10.67	10.60	10.60
May	10.80	10.80	10.80	10.80
July	10.70	10.70	10.70	10.70

Sales: 400,000 lbs.  
Open interest at close, Fri., Dec. 23: Dec., 49; Jan., 134; Mar., 115; May 85, and July, 7 lots.

WEDNESDAY, DEC. 28, 1960

Jan.	10.50	10.50	10.50	10.50
Mar.	10.62	10.62	10.57	10.57b
May	10.80	10.80	10.80	10.80
July	10.70	10.70	10.70	10.70n

Sales: 530,000 lbs.  
Open interest at close, Tues., Dec. 27: Dec., 49; Jan., 134; Mar., 115; May, 87, and July, 7 lots.

THURSDAY, DEC. 29, 1960

Jan.	10.47	10.50	10.47	10.47b
Mar.	10.67	10.67	10.62a	10.62a
May	10.87	10.87	10.80	10.82b
July	10.77a	10.77a	10.77a	10.77a

Sales: 520,000 lbs.  
Open interest at close, Wed., Dec. 28: Dec., 49; Jan., 130; Mar., 114; May, 84, and July, 7 lots.

## CHICAGO LARD STOCKS

Stocks of drummed lard in Chicago were reported in pounds by the Board of Trade, as follows:

	Dec. 23	Dec. 26
P.S. lard (a)	2,406,119	880,000
P.S. lard (b)	850,651	401,157
D.R. lard (a)	1,243,799	920,000
D.R. lard (b)	320,635	2,899,523
TOTAL LARD	4,831,204	5,100,680

(a) Made since October 1, 1960.  
(b) Made previous to Oct. 1, 1960.

## SLICED BACON

Sliced bacon production for the week ended December 10, amounted to 20,954,216 lbs., according to the U. S. Department of Agriculture.

## Meats At 5-Mo. High

Meat prices for the week ended December 13 averaged their highest in about five months, according to the Bureau of Labor Statistics wholesale price index. The average wholesale price index on meats at 97.8 was up from 97.5 for the previous week and compared with the last previous high of 98.3 established in July. Meanwhile, the average primary market price index held steady at 119.5. The same indexes a year ago were 88.0 and 118.9 respectively.

## MARGINS ON LIGHTER HOGS DIP SHARPLY

(Chicago costs, credits and realizations for Tuesday)

Markdowns on pork in the face of a rising live market swept cut-out margins deeper into negative positions. The cut-backs, most severe on light hogs, hit the two heavier classes with less impact. Margins on heavies were barely changed from last week as costs and realizations held fairly steady.

	180-220 lbs.— Value	220-240 lbs.— Value	240-270 lbs.— Value
	per cwt. live	per cwt. fin.	per cwt. fin.
Lean cuts	\$12.79	\$18.24	\$11.67
Fat cuts, lard	5.07	7.24	\$16.30
Ribs, trimmings, etc.	2.06	2.95	7.06
Cost of hogs	18.25	17.75	10.63
Condemnation loss	.08	.08	14.79
Handling, overhead	2.64	2.40	4.50
TOTAL COST	20.97	20.25	28.29
TOTAL VALUE	19.92	28.43	16.91
Cutting margin	1.05	1.52	2.35
Margin last week	—	—	—

## PACIFIC COAST WHOLESALE LARD PRICES

	Los Angeles	San Francisco	No. Portland
1-lb. cartons	15.00@16.25	Dec. 27 16.00@18.00	Dec. 27 14.50@18.50
50-lb. cartons & cans	14.00@15.50	16.00@17.00	None quoted
Tierces	13.50@15.00	15.00@16.00	13.50@15.50

## PACKERS' WHOLESALE

### LARD PRICES

Wednesday, Dec. 28, 1960

Refined lard, drums, f.o.b. Chicago	\$13.12
Refined lard, 50-lb. fiber cubes, f.o.b. Chicago	13.62
Kettle rendered, 50-lb. tins, f.o.b. Chicago	14.12
Leaf, kettle rendered, drums, f.o.b. Chicago	14.12
Lard flakes	13.87
Standard shortening, North & South, delivered	19.50
Hydrogenated shortening, N. & S., drums, del'vd.	19.75

## WEEK'S LARD PRICES

P.S. or D.R. cash tierces (Bd. Trd.)	Dry loose (Bd. Trd.)	Ref. in 50-lb. tins (Open Mkt.)
Dec. 23	10.20n	9.50
Dec. 26	10.20n	9.25
Dec. 27	10.20n	9.25
Dec. 28	10.20n	9.25
Dec. 29	10.20n	9.25

Note: add 1/2¢ to all lard prices ending in 2 or 7.  
n-nominal, a-asked, b-bid

## HOG-CORN

### RATIOS COMPARED

The hog-corn ratio based on barrows and gilts at Chicago for the week ended Dec. 24, 1960, was 17.0, the U. S. Department of Agriculture has reported. This ratio compared with the 17.0 ratio for the preceding week and 10.5 a year ago. These ratios were calculated on the basis of No. 3 yellow corn selling at \$1.036, \$1.012 and \$1.110 per bu. during the three periods, respectively.

## VEGETABLE OILS

Wednesday, Dec. 28, 1960

Crude cottonseed oil, f.o.b. Texas	10 @ 10 1/4
Valley	10 1/4
Southeast	10 1/4 @ 10 1/2
Corn oil in tanks, f.o.b. Decatur	15 1/2
Soybean oil, f.o.b. mills	9.92 @ 9.95
Coconut oil, f.o.b. Pacific Coast	11 1/2 @ 11 1/4
Peanut oil, f.o.b. mills	13
Cottonseed foots: Midwest, West Coast	1 1/2
East	1 1/2
Soybean foots: Midwest	1 1/2

## OLEOMARGARINE

Wednesday, Dec. 28, 1960

White dom. veg., solids, 30-lb. cartons	23 1/4
Yellow quarters, 30-lb. cartons	25 1/4
Milk churned pastry, 750-lb. lots, 30's	25 1/4
Water churned pastry, 750-lb. lots, 30's	24 1/2
Bakers, drums, tons	18 1/4 @ 20

## OLEO OILS

Prime oleo stearine, bags	11 1/4
Extra oleo oil (drums)	15 1/4
Prime oleo oil (drums)	15 1/4

## N. Y. COTTONSEED OIL CLOSINGS

Closing cottonseed oil futures in New York were as follows:  
Dec. 23—Mar., 12.29; May, 12.30;  
July, 12.31; Sept., 12.16; Oct., 12.05, and Dec., 11.90b-12.00a.  
Dec. 26—Holidays, no trading in cottonseed oil futures.  
Dec. 27—Mar., 12.32; May, 12.38; July, 12.38; Sept., 12.18b; Oct., 12.09, and Dec., 11.95b-12.05a.  
Dec. 28—Mar., 12.32; May, 12.39-38; July, 12.38-39; Sept., 12.19b-25a; Oct., 12.09b-11a, and Dec., 11.90b-12.05a.  
Dec. 29—Mar., 12.37-39; May, 12.49-48; July, 12.50-48; Sept., 12.28b; Oct., 12.21, and Dec., 11.97b-12.09a.  
a-asked, b-bid.

# BY-PRODUCTS...FATS AND OILS

## BY-PRODUCTS MARKET

(F.O.B. Chicago, unless otherwise indicated)  
Wednesday, Dec. 28, 1960

### BLOOD

Unground, per unit of ammonia, bulk ..... 4.75@ 5.00n

### DIGESTER FEED TANKAGE MATERIALS

Wet rendered, unground, loose  
Low test ..... 4.75@ 5.00n  
Med. test ..... 5.50@ 5.75n  
High test ..... 4.75@ 5.00n

### PACKINGHOUSE FEEDS

	Carlots, ton
50% meat, bone scraps, bagged	\$77.50@ 80.00
50% meat, bone scraps, bulk	75.00@ 77.50
60% digester tankage, bagged	77.50@ 80.00
60% digester tankage, bulk	75.00@ 77.50
90% blood meal, bagged	115.00
Steam bone meal, 50-lb. bags (specially prepared)	92.50
60% steam bone meal, bagged	85.00@ 90.00

### FERTILIZER MATERIALS

Feather tankage, ground,  
per unit ammonia (85% prot) \*3.50@ 3.75  
Hoof meal, per unit ammonia .. 16.50@ 6.75

### DRY RENDERED TANKAGE

Low test, per unit protein ..... 1.40n  
Medium test, per unit prot. .... 1.30@ 1.35n  
High test, per unit prot. .... 1.25n

### GELATIN AND GLUE STOCKS

Bone stock, (gelatin), ton	14.50
Jaws, feet (non-gel), ton	1.50@ 3.50
Trim bone, ton	3.50@ 7.50
Pigskins (gelatin), lb.	7 1/4@ 7 1/2
Pigskins, smoked, edible	16@ 18 1/2

### ANIMAL HAIR

Winter coll, dried, c.a.f. mid-east, ton	80.00@ 85.00
Winter coll, dried, mid-west, ton	70.00@ 75.00
Cattle switches, piece	1 1/2@ 2 1/2
Winter processed (Nov.-Mar.) gray, lb.	15@ 20

\*Del. mid-west, †del. mid-east, n-nom., a-asked

## TALLOW and GREASES

Wednesday, Dec. 28, 1960

The inedible tallow and grease market maintained its firm undertone late last week, and some trading was consummated at steady to fractionally higher prices. Bleachable fancy tallow sold at 5 3/8¢, special tallow at 5¢, and yellow grease at 4 1/2¢, all c.a.f. Chicago. Choice white grease, all hog, was bid at 7 1/2¢, c.a.f. Chicago, and at 8 1/2¢, c.a.f. New York. Bleachable fancy tallow was sought at 6 1/4@6 3/8¢, delivered East, and some indications of 6 1/2¢ were reported in the market on the high titre stock. Edible tallow was bid at 8 1/2¢, f.o.b. River, and offered at the same price f.o.b. Denver.

Users of inedible fats were willing to pay the last traded levels for certain materials, but again producers asked fractionally higher prices on the limited supply. Bleachable fancy tallow was bid at 5 3/8¢, special tallow at 5¢, No. 1 tallow and yellow grease at 4 1/2¢, all c.a.f. Chicago. Some choice white grease, all hog, traded at 8 5/8¢, c.a.f. New Orleans

and for quick shipment; continued inquiry was apparent at 8 1/2¢, c.a.f. New York, and at 7 1/2¢, c.a.f. Chicago. Edible tallow was available at 9¢, c.a.f. Chicago, and indications of 8 7/8¢ were reported in the market. Edible tallow was bid at 8 1/2@8 3/4¢, f.o.b. River, and price depending on point. It was reported that some No. 1 tallow and yellow grease sold at 4 1/2¢, c.a.f. Chicago. Prime tallow was bid at 5 1/4¢, c.a.f. Chicago.

At midweek, choice white grease, all hog, traded at 8 5/8¢, delivered New York, and it was reported that high titre bleachable fancy tallow sold at 6 1/2¢, also c.a.f. New York. Bleachable fancy tallow was sought at 5 3/8¢, c.a.f. Chicago, but offered 1/8¢ higher. Other materials also reported sought at the last traded levels; however, producers were persistent in asking higher prices.

Edible tallow was available at 9¢, c.a.f. Chicago, and it was bid at 8 3/4@8 7/8¢, quality of stock considered. Edible tallow was also available at 8 1/2¢, f.o.b. Denver, with bids 1/8@1/4¢ lower. Some users still talked 8 1/2@8 3/8¢, f.o.b. Denver on edible tallow, and again type of



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stock considered. Yellow grease sold at 4½¢, c.a.f. Chicago. Regular bleachable fancy tallow was bid at 6¼¢, and some indications of ½¢ higher were heard, c.a.f. New York.

**TALLOW:** Wednesday's quotations: edible tallow, 8½¢@8¾¢, f.o.b. River, and 8½¢@9¢, Chicago basis; original fancy tallow, 5½¢; bleachable fancy tallow, 5½¢; prime tallow, 5¼¢; special tallow, 5¢; No. 1 tallow, 4½¢, and No. 2 tallow, 4¢.

**GREASES:** Wednesday's quotations: choice white grease, all hog, 7½¢; B-white grease, 5¢; yellow grease, 4½¢, and house grease, 4¼¢.

## EASTERN BY-PRODUCTS

New York, Dec. 28, 1960

Dried blood was quoted today at \$4.25 per unit of ammonia. Wet rendered tankage was listed at \$4.75@5 per unit of ammonia and dry rendered tankage was quoted at \$1.15 per protein unit.

## U.S. Jan.-Sept. Hide Exports

### Up From Same Period Last Year

Exports of hides and skins from the United States rose to 1,557,000 pieces in the first three quarters of this year from 1,423,000 in the same period of last year, the Foreign Agricultural Service has reported. Increased U.S. production of cattle-hides and calfskins and relatively stable prices, plus reduced production in Australia helped the U.S. hide export situation, according to the government agency.

U.S. exports of hides and skins, for year 1959, and January-September, 1959-60, appear below, as follows.

	Year	Jan.-Sept.	1960
	1959	1959	1960
	1,000	1,000	1,000
	pieces	pieces	pieces
<b>Cattlehides:</b>			
Canada .....	591	427	311
U.S. ....	503	296	384
Germany .....	629	486	436
Holland .....	568	368	988
Belgium .....	92	64	71
U.K. Kingdom .....	47	39	53
Roumania .....	139	105	44
Japan .....	1,083	862	1,497
Others .....	503	345	845
<b>Total</b> .....	<b>4,155</b>	<b>2,992</b>	<b>4,629</b>
<b>Calfskins:</b>			
Canada .....	573	468	404
France .....	24	14	8
W. Germany .....	150	87	84
Italy .....	205	146	153
Holland .....	129	87	100
Switzerland .....	26	18	57
U.K. Kingdom .....	13	5	55
Japan .....	178	157	211
Others .....	116	76	71
<b>Total</b> .....	<b>1,414</b>	<b>1,058</b>	<b>1,143</b>
<b>Kipskins:</b>			
Canada .....	4	2	4
Belgium .....	23	23	15
W. Germany .....	126	85	79
Holland .....	127	81	49
U.K. Kingdom .....	4	0	16
Japan .....	95	84	70
Others .....	102	80	70
<b>Total</b> .....	<b>483</b>	<b>355</b>	<b>303</b>
<b>Sheep, lamb:</b>			
Canada .....	799	558	626
Mexico .....	131	116	83
France .....	9	7	10
W. Germany .....	37	13	15
Sweden .....	120	80	69
U.K. Kingdom .....	606	504	420
Others .....	225	145	334
<b>Total</b> .....	<b>1,927</b>	<b>1,423</b>	<b>1,557</b>
<b>Includes goat and kidskins.</b>			

## CHICAGO HIDES

Wednesday, Dec. 28, 1960

**BIG PACKER HIDES:** Major packers moved an estimated 116,000 hides last week, including bookings to their tanning subsidiaries. River heavy native steers were ½¢ lower at 12¢, and low freight stock moved at 12½¢. A car of River brands, heavy Texas and Colorado steers sold ½¢ lower. Northern branded cows moved well at the ½¢ decline and a load of Chicago native and branded bulls sold at 9¼¢ and 8¾¢, respectively, December-forward selections.

Heavy native cows moved well at a markdown of 1¢. Northern light skins, sold at premium of 17¢. Supplies were fairly well sold by the end of the week.

No action was reported on Tuesday, but heavy native steers, branded steers and branded cows were all bid at steady prices, with offerings slow in coming out. Wednesday, practically all selections were bid at steady prices. Packers were reluctant to go along, however, preferring to watch developments and consider buyer bids.

**SMALL PACKER AND COUNTRY HIDES:** While some buyers were expressing bearish intentions on Midwestern small packer hides, the market maintained a steady undertone, with some offerings held higher. Midwestern 50/52-lb. all-weights were pegged at 12½¢@13¢ nominal, 60/62's at 10½¢@11¢, and Midwestern small packer bulls, 85-lb. average, were quoted at 8¢@8¼¢ nominal, all f.o.b. basis. The country hide market was dull the past week, with buyers and sellers far from agreement.

Country locker-butcher, 50/52-lb. averages ruled steady at 10½¢@11¢, f.o.b. shipping points. Same average renderers were unchanged at 9½¢@10¢ nominal, while the bulk of the No. 3's were pegged at 7½¢, f.o.b. country points. Best trimmed Northern horsehides were steady at 7.75¢@8.00¢, f.o.b. basis, as were ordinary lots at 5.50¢@6.00¢.

**CALFSKINS AND KIPSKINS:** No new activity was reported in the big packer market, with last sales of Northern light calf at 55¢, and heavies last moved in volume at 57½¢. Last week about 5,000 River kips sold steady at 45¢, with over-weights nominal at 35¢. Small packer allweight calf was steady at 41¢@42¢, while allweight kips held steady at 32¢@34¢. Country allweight calf was steady at 26¢@27¢, as were allweight kips at 22¢@23¢. Last actual

sales of slunks were at 1.30¢@1.35¢, with 1.50 probable.

**SHEEPSKINS:** Shearlings were steady this week, with Northern-River No. 1's reported at .80¢@1.00¢, and No. 2's at .50¢@.65¢. Southwestern No. 1's held steady at 1.25¢@1.30¢, as were No. 2's at .75¢@.85¢. Northern-River fall clips were strong at 1.50¢@1.60¢, as were Southwestern's at 1.85¢.

Midwestern lambs were quoted at 2.75¢@2.85¢ per cwt. liveweight basis. Eastern pelts were being held at around 3.00¢, with no confirmation of sales. Full wool dry pelts were pegged at .20¢ nominal. Pickled lamb skins were quoted at 7.75¢@8.00¢ and sheep at 10.00¢@10.25¢ per dozen.

## CHICAGO HIDE QUOTATIONS

### PACKER HIDES

	Wednesday, Dec. 28, 1960	Cor. date 1959
Lgt. native steers .....	17½¢n	22 @ 22½
Hvy. nat. steers .....	12 @ 12½n	14½
Ex. lgt. nat. steers .....	18½n	24n
Butt-brand. steers .....	10½n	13½n
Colorado steers .....	9½n	12½n
Hvy. Texas steers .....	10½n	13n
Light Texas steers .....	15½n	20n
Ex. lgt. Texas steers .....	16½n	22n
Heavy native cows .....	12 @ 12½n	15½n
Light nat. cows .....	15½ @ 16½n	21½ @ 22
Branded cows .....	11 @ 12n	14½n
Native bulls .....	9½ @ 9¾n	11 @ 12n
Branded bulls .....	8½ @ 8¾n	11 @ 12n
<b>Calfskins:</b>		
Northern, 10/15 lbs. ....	57½n	50n
10 lbs./down .....	55n	62½n
Kips, Northern native, 15/25 lbs. ....	45n	43½n

### SMALL PACKER HIDES

<b>STEERS AND COWS:</b>		
60/62-lb. avg. ....	10½ @ 11n	12½ @ 13n
50/52-lb. avg. ....	12½ @ 13n	16 @ 16½n

### SMALL PACKER SKINS

Calfskins, all wts. ....	.41 @ 42n	42 @ 45n
Kipskins, all wts. ....	.32 @ 34n	36 @ 38n

### SHEEPSKINS

<b>Packer shearlings:</b>		
No. 1 .....	.80 @ 1.00	1.50 @ 1.75
No. 2 .....	.50 @ .65	1.20 @ 1.50
Dry Pelts .....	.20n	.23n
Horsehides, untrim. ....	8.00 @ 8.25n	11.00 @ 11.50n
Horsehides, trim. ....	7.75 @ 8.00n	10.50 @ 11.00n

## N. Y. HIDE FUTURES

Friday, Dec. 23, 1960

Jan. ....	15.20b	15.50	15.50
Apr. ....	14.70b	15.00	14.96
July ....	14.45b	.....	14.95b-15.00a
Oct. ....	14.40b	.....	14.55b-.75a
Jan. ....	14.25b	.....	14.50b-.70a
			14.40b-.65a

Sales: 21 lots.

Monday, Dec. 26, 1960

Holiday, no trading in hide futures.

Tuesday, Dec. 27, 1960

Jan. ....	15.50	15.65	15.40	15.40b-.60a
Apr. ....	14.80b	15.30	15.03	15.13
July ....	14.50b	14.80	14.80	14.75b-.85a
Oct. ....	14.35b	.....	.....	14.40b-.70a
Jan. ....	14.30b	.....	.....	14.30b-.60a

Sales: 19 lots.

Wednesday, Dec. 28, 1960

Jan. ....	15.45b	15.50	15.50	15.50
Apr. ....	15.14b	15.19	15.11	15.15b-.18a
July ....	14.75b	14.85	14.85	14.85
Oct. ....	14.40b	.....	.....	14.50b-.75a
Jan. ....	14.25b	.....	.....	14.40b-.65a

Sales: 23 lots.

Thursday, Dec. 29, 1960

Jan. ....	15.40b	15.50	15.43	15.43
Apr. ....	15.11b	15.20	15.08	15.09-.08
July ....	14.75b	15.00	14.90	14.85b-.95a
Oct. ....	14.40b	.....	.....	14.55b-.85a
Jan. ....	14.30b	.....	.....	14.40b-.70a

Sales: 12 lots.



# LIVESTOCK MARKETS... Weekly Review

## Texas, Fast-Growing Beef Producing State and Tops In Cattle Population, Is Net Importer

Although Texas claims title to being the most populous cattle state (with figures to prove it), it is a net importer of beef whether live or dressed—in fact, more than half of what it uses is imported. How long the deficit situation will continue remains to be seen, but cattle feeding in the state has grown at a phenomenal rate in recent years and appears headed to a new record this year.

It was pointed out at the recent beef cattle short course at Texas A & M that Texas produces almost eight times as much grain as California and over 50 times as much as Arizona. Yet California last year fed out an estimated 1,514,000 head of cattle and Arizona about a third that many, while Texas feedlots finished only about 600,000.

Existing yards in Texas capable of handling 500 or more cattle have a total capacity of around 400,000 cattle at a time, USDA and Texas A & M extension service estimates indicate. Additions to these yards and new yards now under construction are expected to boost the capacity by about 80,000 or more head.

### SLAUGHTER STEERS AND HEIFERS

Steers and heifers sold out of first hands for slaughter at seven markets in November, 1960-59; numbers, costs and percentages are shown below, as follows:

	—Number of head—		Pct. of total		Av. price, cwt.	
	Nov. 1960	Nov. 1959	Nov. 1960	Nov. 1959	Nov. 1960	Nov. 1959
STEERS, NOVEMBER, 1960-59						
Prime .....	23,482	14,916	7.7	4.3	27.06	27.80
Choice .....	160,132	194,051	52.2	55.9	25.47	25.93
Good .....	105,927	114,570	34.5	33.0	23.91	24.22
Standard .....	15,009	19,802	4.9	5.7	21.37	21.88
Commercial .....	45	74	..	..	23.95	23.09
Utility .....	2,300	3,787	7	1.1	19.75	19.88
All grades .....	306,895	347,200			24.85	25.19
HEIFERS, NOVEMBER, 1960-59						
Prime .....	3,802	3,906	2.9	2.5	25.35	25.70
Choice .....	74,237	96,043	56.4	54.7	24.14	24.47
Good .....	46,401	55,318	35.2	35.2	22.80	23.26
Standard .....	5,980	9,894	4.5	6.3	20.60	20.93
Utility .....	1,284	2,061	1.0	1.3	17.56	18.09
All grades .....	131,694	157,212			23.51	23.80

### FEDERALLY INSPECTED SLAUGHTER

Federally inspected slaughter during Nov., 1960 and 1959, with cumulative totals for the 11-month periods, was reported as follows:

	<b>CATTLE</b>		<b>HOGS</b>	
	1960	1959	1960	1959
January	1,564,384	1,440,819	5,516,333	5,884,657
February	1,436,803	1,219,323	5,841,063	5,686,086
March	1,576,941	1,334,418	6,116,138	5,732,866
April	1,411,633	1,435,331	5,571,122	5,651,900
May	1,505,641	1,412,043	5,483,058	4,969,554
June	1,691,903	1,473,051	5,086,245	4,901,694
July	1,591,699	1,556,888	4,304,435	5,184,157
August	1,787,102	1,449,511	5,202,928	4,977,321
September	1,781,880	1,539,168	5,165,088	5,767,379
October	1,745,652	1,586,135	5,407,051	6,646,367
November	1,624,552	1,461,910	5,707,057	6,337,172
December	1,552,143	1,552,143	6,968,083	6,968,083
	<b>CALVES</b>		<b>SHEEP</b>	
	1960	1959	1960	1959
January	413,350	424,272	1,236,564	1,322,228
February	388,048	376,753	1,076,026	1,079,819
March	481,727	423,088	1,087,886	1,143,432
April	394,150	405,652	1,054,106	1,100,519
May	378,098	357,644	1,109,721	1,017,206
June	396,897	365,782	1,136,793	1,056,287
July	373,655	381,966	1,112,789	1,106,992
August	449,928	359,460	1,240,422	1,010,236
September	513,509	415,026	1,322,820	1,177,359
October	516,157	471,247	1,352,732	1,200,119
November	501,720	438,435	1,191,914	1,069,554
December	455,837	455,837	1,181,981	1,181,981
<b>JANUARY-NOVEMBER TOTALS</b>				
	1960	1959		
Cattle	17,818,190	15,906,485		
Calves	4,808,339	4,419,305		
Hogs	60,400,517	61,739,155		
Sheep	12,921,773	12,283,721		

## LIVESTOCK PRICES AT LEADING MARKETS

Livestock prices at five western markets on Tuesday, December 27, were reported by the Agricultural Marketing Service, Livestock Division, as follows:

HOGS:	N.Y. Yds.	Chicago	Sioux City	Omaha	St. Paul
<b>BARROWS &amp; GILTS:</b>					
U.S. No. 1:					
180-200	—	—	\$17.00-17.85	—	\$18.25-18.50
200-220	—	—	17.75-18.00	\$18.00-18.50	18.25-18.50
220-240	—	—	17.75-18.00	18.00-18.50	18.00-18.50
U.S. No. 2:					
180-200	—	—	17.00-17.75	—	—
200-220	—	—	17.60-17.75	—	18.00-18.25
220-240	—	—	17.60-17.75	—	17.75-18.25
240-270	—	—	17.00-17.60	—	—
U.S. No. 3:					
200-220	\$17.25-17.75	\$17.75-18.25	—	—	17.50-17.75
220-240	17.00-17.75	17.00-18.25	17.25-17.35	—	17.00-17.75
240-270	16.25-17.25	16.50-17.00	16.75-17.25	—	16.50-17.25
270-300	15.50-16.50	16.25-16.50	15.75-16.50	—	15.75-16.75
U.S. No. 1-2:					
180-200	18.00-18.25	18.25-18.75	17.00-17.85	17.50-18.00	18.00-18.25
200-220	18.00-18.35	18.50-18.75	17.75-18.00	18.00-18.40	18.00-18.25
220-240	17.75-18.25	17.75-18.50	17.75-18.00	18.00-18.40	17.75-18.25
U.S. No. 2-3:					
200-220	17.50-18.00	18.00-18.25	17.50-16.60	17.50-17.75	17.50-17.75
220-240	17.25-18.00	17.25-18.25	17.50-17.60	17.50-17.75	17.00-17.75
240-270	16.25-17.50	16.50-17.25	16.75-17.50	16.50-17.50	16.50-17.50
270-300	15.50-16.75	16.25-17.75	16.00-16.85	15.75-17.00	15.75-16.75
U.S. No. 1-2-3:					
180-200	17.75-18.10	17.75-18.50	17.00-17.75	17.00-17.75	17.50-17.75
200-220	17.75-18.10	18.00-18.50	17.50-17.75	17.50-17.75	17.50-17.75
220-240	17.25-18.10	17.25-18.50	17.50-17.75	17.50-17.85	17.00-17.75
240-270	16.25-17.75	16.75-17.50	17.00-17.50	16.75-17.75	16.50-17.25
<b>SOWS:</b>					
U.S. No. 1-2-3:					
180-270	14.75-15.25	—	—	15.00-15.50	—
270-330	14.25-15.00	—	14.25-14.75	14.50-15.50	14.75-15.00
330-400	13.25-15.00	13.25-15.00	13.25-14.25	13.75-15.00	13.25-14.75
400-550	11.75-13.75	12.25-13.50	11.75-13.25	12.75-14.00	12.00-13.75

### SLAUGHTER CATTLE & CALVES

<b>STEERS:</b>					
prime:					
900-1100	—	27.50-28.50	27.25-28.00	27.00-27.75	27.25-28.25
1100-1300	—	27.50-28.75	27.25-28.00	27.00-27.75	27.25-28.25
1300-1500	—	26.00-28.75	26.50-27.50	26.25-27.50	27.00-28.25
Choice:					
700-900	25.25-26.50	—	—	—	26.00-27.25
900-1100	25.50-27.25	26.00-28.00	25.75-27.25	25.50-27.00	26.00-27.25
1100-1300	25.50-27.25	25.25-28.00	25.50-27.25	24.75-27.25	25.75-27.00
1300-1500	25.00-26.50	24.25-27.25	25.00-27.25	24.00-27.00	25.50-27.00
Good:					
700-900	23.25-25.25	23.50-26.00	23.00-25.75	22.50-25.50	24.50-26.00
900-1100	23.50-25.50	23.50-26.00	23.00-25.75	22.50-25.50	24.50-26.00
1100-1300	23.50-25.50	23.25-25.25	22.75-25.75	22.25-25.50	24.50-26.00
Stand.,					
all wts.	19.75-23.50	21.00-23.50	20.50-23.00	20.00-22.00	20.00-24.50
Utility,					
all wts.	16.75-19.75	20.00-21.00	19.00-20.50	19.00-20.25	17.50-20.00
<b>HEIFERS:</b>					
prime:					
700-900	—	—	—	—	26.00-26.75
900-1100	—	26.50-27.00	26.00-26.75	26.25-26.75	26.00-26.75
Choice:					
700-900	24.25-26.25	25.25-26.50	24.50-26.00	24.75-26.50	25.25-26.00
900-1100	24.00-26.25	25.00-26.50	24.50-26.00	24.75-26.50	25.00-26.00
Good:					
600-800	22.50-24.25	23.00-25.25	22.25-24.50	22.25-24.75	23.25-25.25
800-1000	22.25-24.25	22.75-25.25	22.25-24.50	22.25-24.75	23.25-25.25
Stand.,					
all wts.	18.25-22.50	20.50-22.75	20.00-22.25	20.00-22.25	20.00-23.25
Utility,					
all wts.	16.00-18.25	15.50-20.50	18.00-20.00	18.00-20.25	17.00-20.00
<b>COWS, all wts.:</b>					
Commercial	15.00-16.00	15.00-16.75	14.75-16.00	15.00-16.00	15.00-16.00
Utility	14.50-15.50	14.25-16.50	13.50-15.00	13.50-15.00	14.50-15.00
Cutter	13.00-15.00	13.50-15.00	12.00-13.75	12.25-13.75	13.00-14.00
Canner	10.50-13.50	11.25-13.50	11.00-12.25	11.00-12.50	11.50-13.00
<b>BULLS, (Yrds. Excl.) all weights:</b>					
Commercial	17.50-18.50	16.50-19.75	16.00-18.50	16.00-18.50	17.50-18.50
Utility	17.00-17.50	17.50-19.75	16.00-18.50	16.50-18.50	18.00-20.00
Cutter	14.50-17.00	16.50-17.50	14.50-16.00	15.00-16.50	15.00-16.50
<b>VEALERS: all weights:</b>					
Ch. & pr.	36.00	25.00	—	24.00	26.00-34.00
Std. & gd.	22.00-32.00	16.00-24.00	—	18.00-22.00	17.00-30.00
<b>CALVES (500 lbs. down):</b>					
Choice	23.00-27.00	—	—	—	20.00-22.00
Std. & gd.	18.00-25.00	—	—	—	15.00-20.00
<b>SHEEP &amp; LAMBS:</b>					
<b>LAMBS (110 lbs. down):</b>					
Prime	17.50-18.50	18.50-19.00	17.75-18.00	—	17.25-17.75
Choice	16.00-17.50	17.75-18.50	17.00-17.75	17.00-18.00	16.00-17.25
Good	15.00-16.00	17.00-17.75	15.00-17.00	15.25-17.00	15.50-16.00
<b>LAMBS (105 lbs. down, shorn):</b>					
Prime	16.50-17.50	—	16.50-16.75	—	—
Choice	15.50-16.50	—	15.75-16.50	16.00-16.75	16.50
Good	14.50-15.50	—	15.00-15.75	15.00-16.00	—
<b>EWES:</b>					
Gd. & ch.	4.00-5.00	5.50-6.00	3.50-5.00	4.75-7.00	5.00-6.00
Cull. & util.	4.50-6.25	5.00-6.00	4.00-6.00	4.00-6.50	3.50-5.00

## CORN BELT DIRECT TRADING

Des Moines, Dec. 28—  
Prices on hogs at 14 plants  
and about 30 concentration  
yards in interior Iowa and  
southern Minnesota, as  
quoted by the USDA:

BARROWS & GILTS:	Cwt.
U.S. No. 1, 200-220	\$17.50@18.00
U.S. No. 1, 220-240	17.25@17.75
U.S. No. 2, 200-220	17.00@17.75
U.S. No. 2, 220-240	16.65@17.50
U.S. No. 2, 240-270	15.90@17.00
U.S. No. 3, 200-220	16.60@17.35
U.S. No. 3, 220-240	16.50@17.10
U.S. No. 3, 240-270	15.75@16.65
U.S. No. 3, 270-300	15.00@16.00
U.S. No. 1-2, 200-220	17.25@17.90
U.S. No. 1-2, 220-240	17.00@17.65
U.S. No. 2-3, 200-220	17.00@17.50
U.S. No. 2-3, 220-240	16.65@17.25
U.S. No. 2-3, 240-270	15.90@16.75
U.S. No. 2-3, 270-300	15.15@16.25
U.S. No. 1-3, 180-200	16.75@17.50
U.S. No. 1-3, 200-220	17.00@17.75
U.S. No. 1-3, 220-240	16.65@17.50
U.S. No. 1-3, 240-270	15.90@17.00

SOWS:  
U.S. No. 1-3, 270-330 13.85@15.25  
U.S. No. 1-3, 330-400 12.85@14.65  
U.S. No. 1-3, 400-550 11.35@13.65

Corn Belt hog receipts,  
as reported by the USDA:

	This week	Last week	Year actual
Dec. 22	63,000	64,000	34,000
Dec. 23	43,000	70,000	Hol.
Dec. 24	17,000	34,000	46,000
Dec. 26	7,000	100,000	100,000
Dec. 27	106,000	79,000	111,000
Dec. 28	85,000	66,000	72,000

## LIVESTOCK PRICES AT ST. JOSEPH

Livestock prices at St. Joseph, Tuesday, Dec. 27, were as follows:

CATTLE:	Cwt.
Steers, ch. & pr.	\$25.50@27.25
Steers, good	23.00@25.00
Heifers, gd. & ch.	21.50@26.00
Cows, util. & com'l.	13.50@15.75
Cows, can. & cut.	11.00@14.00
Bulls, util. & com'l.	15.50@17.50
VEALERS:	
Good & choice	20.00@25.00
Calves, gd. & ch.	19.00@23.00
BARROWS & GILTS:	
U.S. No. 3, 220/240	17.25@17.50
U.S. No. 3, 240/270	16.75@17.25
U.S. No. 3, 270/300	16.25@16.75
U.S. No. 1-2, 180/200	17.75@18.25
U.S. No. 1-2, 200/220	17.75@18.25
U.S. No. 1-2, 220/240	17.75@18.25
U.S. No. 2-3, 200/220	17.50@17.75
U.S. No. 2-3, 220/240	17.50@17.75
U.S. No. 2-3, 240/270	17.50@17.75
U.S. No. 1-3, 180/200	17.50@17.75
U.S. No. 1-3, 200/220	17.50@17.75
U.S. No. 1-3, 220/240	17.50@17.75
U.S. No. 1-3, 240/270	17.00@17.75

SOWS, U.S. No. 1-3:  
270/330 lbs. .... 14.50@14.75  
330/400 lbs. .... 13.75@14.50  
400/550 lbs. .... 12.25@13.75

LAMBS:  
Choice & prime .... 17.25@18.00  
Good & choice .... 16.50@17.00

## LIVESTOCK PRICES AT DENVER

Livestock prices at Denver on Tuesday, Dec. 27, were as follows:

CATTLE:	Cwt.
Steers, choice	\$24.50@26.40
Steers, standard	25.40@26.85
Heifers, choice	25.40@26.00
Cows, utility	15.00@16.50
Cows, can. & cut.	13.00@15.00
BARROWS & GILTS:	
U.S. No. 1-2, 200/235	18.65@18.75
U.S. No. 1-3, 190/260	18.25@18.50
U.S. No. 3, 190/250	18.00@18.25
SOWS, U.S. No. 2-3:	
300/375 lbs.	14.00@15.00
375/425 lbs., No. 2	13.50@14.50
LAMBS:	
Choice & prime	17.50@18.25
Good & choice	16.50@17.50

## LIVESTOCK PRICES AT INDIANAPOLIS

Livestock prices at Indianapolis, Tuesday, Dec. 27, were as follows:

CATTLE:	Cwt.
Steers, choice	\$27.00@27.50
Steers, good	23.50@26.00
Heifers, gd. & ch.	22.50@26.00
Cows, util. & com'l.	14.00@16.50
Cows, can. & cut.	11.50@14.50
Bulls, util. & com'l.	16.00@19.00
VEALERS:	
Choice & prime	33.00@34.00
Good & choice	26.00@32.00
Stand. & good	20.00@26.00
BARROWS & GILTS:	
U.S. No. 1, 180/220	18.25@18.60
U.S. No. 1, 200/220	18.50@18.75
U.S. No. 3, 200/220	17.25@17.75
U.S. No. 3, 220/240	17.00@17.50
U.S. No. 3, 240/270	16.25@17.00
U.S. No. 3, 270/300	15.50@16.25
U.S. No. 1-2, 180/200	18.25@18.50
U.S. No. 1-2, 200/220	18.25@18.50
U.S. No. 1-2, 220/240	17.75@18.50
U.S. No. 2-3, 200/220	17.50@18.00
U.S. No. 2-3, 220/240	17.25@18.00
U.S. No. 2-3, 240/270	16.25@17.25
U.S. No. 2-3, 270/300	15.50@16.75
U.S. No. 1-3, 180/200	17.75@18.25
U.S. No. 1-3, 200/220	17.75@18.25
U.S. No. 1-3, 220/240	17.25@18.25
U.S. No. 1-3, 240/270	16.50@17.50

SOWS, U.S. No. 1-3:  
270/330 lbs. .... 14.50@15.50  
330/400 lbs. .... 13.25@14.50  
400/550 lbs. .... 12.75@13.75

LAMBS:  
Choice & prime .... 17.50@18.00  
Good & choice .... 15.50@17.50

## LIVESTOCK PRICES AT KANSAS CITY

Livestock prices at Kansas City, Tuesday, Dec. 27, were as follows:

CATTLE:	Cwt.
Steers, choice	24.50@27.25
Steers, good	21.50@25.50
Heifers, gd. & ch.	21.00@26.00
Cows, util. & com'l.	13.75@16.50
Cows, can. & cut.	11.75@14.50
Bulls, util. & com'l.	16.00@17.25
Vealers, gd. & ch.	19.50@25.00
Calves, gd. & ch.	18.50@22.50
BARROWS & GILTS:	
U.S. No. 1, 180/240	18.00@18.25
U.S. No. 3, 200/240	17.00@17.50
U.S. No. 3, 240/270	17.00@17.25
U.S. No. 3, 270/300	16.50@17.00
U.S. No. 1-2, 180/200	17.75@18.00
U.S. No. 1-2, 200/220	17.75@18.10
U.S. No. 1-2, 220/240	17.75@18.15
U.S. No. 2-3, 200/220	17.50@17.75
U.S. No. 2-3, 220/240	17.50@17.75
U.S. No. 2-3, 240/270	17.00@17.50
U.S. No. 2-3, 270/300	16.75@17.25
U.S. No. 1-3, 180/200	17.50@18.00
U.S. No. 1-3, 200/220	17.50@18.00
U.S. No. 1-3, 220/240	17.50@18.00
U.S. No. 1-3, 240/270	17.25@17.75

SOWS, U.S. No. 1-3:  
270/330 lbs. .... 14.50@15.00  
330/400 lbs. .... 13.25@14.25  
400/550 lbs. .... 12.50@13.50

LAMBS:  
Choice & prime .... 16.50@18.00  
Good & choice .... 15.50@17.00

## LIVESTOCK PRICES AT LOUISVILLE

Livestock prices at Louisville on Tuesday, Dec. 27, were as follows:

CATTLE:	Cwt.
Steers, ch. & pr.	\$26.00@29.50
Steers, gd. & ch.	24.00@27.00
Heifers, gd. & ch.	22.00@25.00
Heifers, util. & std.	17.00@22.00
Cows, utility	13.00@16.00
Cows, can. & cut.	10.00@15.00
Bulls, util. & com'l.	18.00@19.00
VEALERS:	
Choice	34.00@35.00
Good & choice	28.00@33.00
Calves, gd. & ch.	20.00@24.00
BARROWS & GILTS:	
U.S. No. 1, 190/210	18.75
U.S. No. 1-2, 190/220	18.50
U.S. No. 2-3, 190/240	17.75@18.25
U.S. No. 3, 200/240	17.25@17.50
SOWS, U.S. No. 2-3:	
300/400 lbs.	13.50@14.00
400/600 lbs.	13.00@13.50
LAMBS:	
Choice & prime	17.00@18.00
Good & choice	15.50@16.50

## WEEKLY LIVESTOCK SLAUGHTER

Slaughter of livestock at major centers during the week ended December 24, 1960, (totals compared) as reported by the U.S. Department of Agriculture:

	Cattle	Calves	Hogs	Sheep
Boston, New York City area <sup>1</sup>	13,858	10,235	52,822	37,866
Baltimore, Philadelphia	8,826	1,742	26,900	3,606
Cincy., Cleve., Detroit, Indpls.	16,110	3,099	124,993	13,011
Chicago area	16,820	7,502	106,872	5,204
St. Paul-Wis. areas <sup>2</sup>	27,210	22,967	113,282	16,955
St. Louis area <sup>3</sup>	9,853	1,511	69,971	5,321
Sioux City-So. Dakota area <sup>4</sup>	23,138	148	106,007	12,461
Omaha area <sup>5</sup>	38,259	148	79,157	14,914
Kansas City	14,816	148	37,154	5,278
Iowa-So. Minnesota <sup>6</sup>	32,913	9,215	303,671	40,044
Louisville, Evansville, Nashville,				
Memphis	4,967	2,424	47,204	....
Georgia-Florida-Alabama <sup>7</sup>	7,685	3,913	29,132	....
St. Joseph, Wichita, Okla., City	18,452	939	49,165	7,597
Ft. Worth, Dallas, San Antonio	9,639	2,940	18,073	12,678
Denver, Ogden, Salt Lake City	18,445	205	14,132	17,908
Los Angeles, San Fran. areas <sup>8</sup>	21,241	1,492	28,435	21,883
Portland, Seattle, Spokane	6,155	169	13,358	2,478
GRAND TOTALS	288,507	68,501	1,156,128	211,936
TOTALS SAME WEEK 1959	229,083	52,465	1,056,919	160,814

<sup>1</sup>Includes Brooklyn, Newark and Jersey City. <sup>2</sup>Includes St. Paul, Minn., and Madison, Milwaukee, Green Bay, Wis. <sup>3</sup>Includes St. Louis National Stockyards, E. St. Louis, Ill., and St. Louis, Mo. <sup>4</sup>Includes Sioux Falls, Huron, Mitchell, Madison and Watertown, S. Dak. <sup>5</sup>Includes Lincoln and Fremont, Nebr., and Glenwood, Iowa. <sup>6</sup>Includes Albert Lea, Austin and Winona, Minn., Cedar Rapids, Davenport, Des Moines, Dubuque, Estherville, Fort Dodge, Marshalltown, Mason City, Ottumwa, Postville, Storm Lake and Waterloo, Iowa. <sup>7</sup>Includes Birmingham, Dothan and Montgomery, Ala., Albany, Atlanta, Augusta, Moultrie and Thomasville, Ga., Bartow, Hialeah, Jacksonville, Ocala and Quincy, Fla. <sup>8</sup>Includes Los Angeles, San Francisco, So. San Francisco, San Jose and Vallejo, Calif.

## LIVESTOCK PRICES AT 10 CANADIAN MARKETS

Average prices per cwt. paid for specific grades of steers, calves, hogs and lambs at 10 leading markets in Canada during the week ended Dec. 17, compared with same week in 1959, as reported to the Provisioner by the Canadian Department of Agriculture:

	GOOD STEERS	VEAL CALVES	HOGS	LAMBS
	All wts.	Gd. & Ch.	Grade B Dressed	Good Handyweights
	1960	1959	1960	1959
Toronto	\$22.75	\$23.14	\$34.50	\$28.20
Montreal	23.30	24.50	29.75	30.00
Winnipeg	21.93	22.43	32.32	32.29
Calgary	21.65	22.40	19.25	20.20
Edmonton	21.00	22.00	23.00	24.90
Lethbridge	21.50	22.25	19.10	25.12
Pr. Albert	20.55	22.25	23.50	24.50
Moose Jaw	20.75	21.90	22.25	25.10
Saskatoon	21.25	21.25	25.75	26.00
Regina	21.25	22.00	27.25	23.00

\*Not available.

## SOUTHERN LIVESTOCK RECEIPTS

Receipts at six packing plant stockyards located in Albany, Columbus, Moultrie, Thomasville, Ga., Dothan, Ala., and Jacksonville, Fla., week ended Dec. 24:

	Cattle and Calves	Hogs
Week ended Dec. 24 (estimated)	2,250	20,600
Week previous (six days)	3,228	22,420
Corresponding week last year	1,609	14,769

## CANADIAN KILL

Inspected slaughter of livestock in Canada, week ended Dec. 17, compared:

	Week ended Dec. 17	Same week 1959
CATTLE		
Western Canada	16,529	14,654
Eastern Canada	14,915	14,972
Totals	31,444	29,626
HOGS		
Western Canada	59,061	86,606
Eastern Canada	50,285	85,034
Totals	109,346	171,640
All hog carcasses graded	120,749	183,733
SHEEP		
Western Canada	4,563	4,824
Eastern Canada	5,961	4,645
Totals	10,524	9,469

## LIVESTOCK RECEIPTS

Receipts at 12 markets for the week ended Friday, Dec. 23, with comparisons:

	Cattle	Hogs	Sheep
Week to date	199,900	306,400	72,400
Previous week	234,800	330,000	94,300
Same wk. 1959	160,300	274,100	52,400

## NEW YORK RECEIPTS

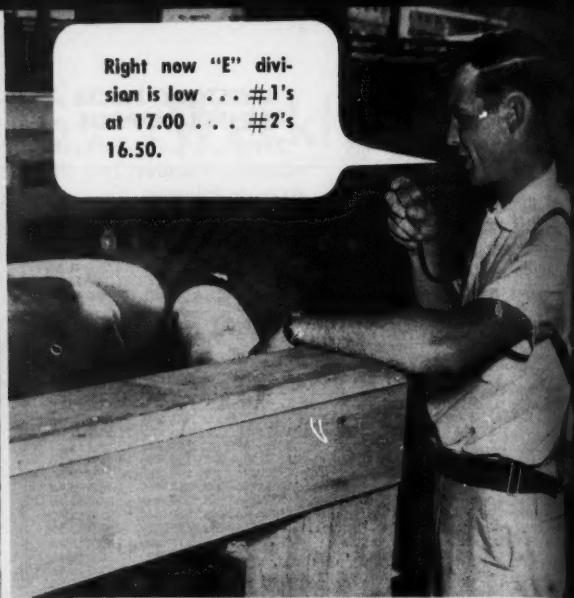
Receipts of livestock at Jersey City and 41st st., New York, market for the week ended Dec. 24:

	Cattle	Calves	Hogs	Sheep
Salable	105	10	none	none
Total, (incl. directs)	1,272	205	18,952	5,333
Prev. wk.—Salable	89	29	none	none
Total, (incl. directs)	1,019	172	15,864	6,740

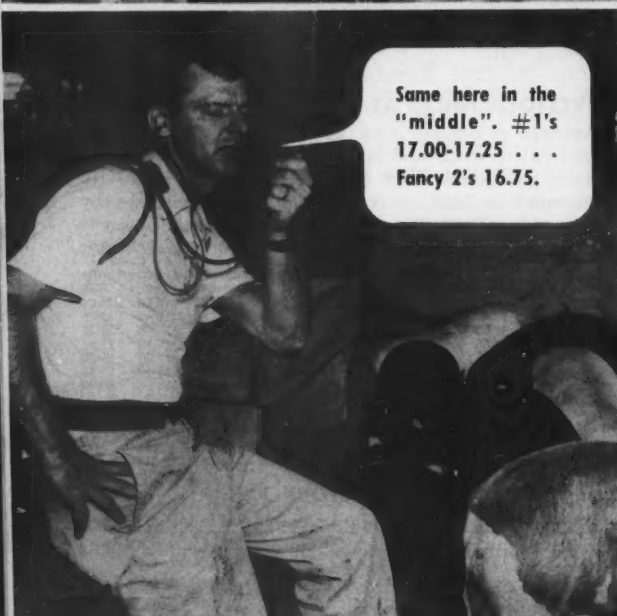
\*Includes hogs at 31st Street.



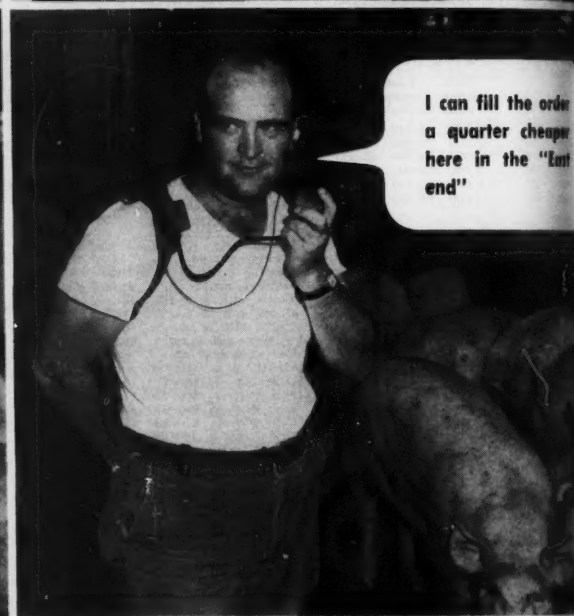
Right now, "M" division meat type #1's cost 17.25, fancy #2's 16.75. Let's have a run down in all divisions.



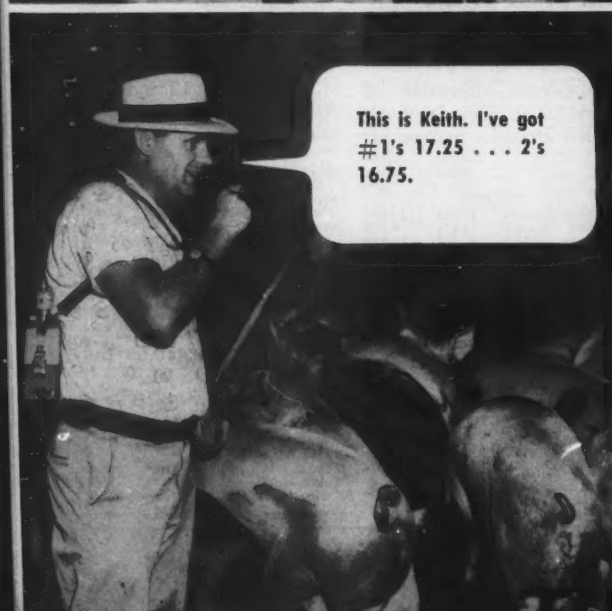
Right now "E" division is low . . . #1's at 17.00 . . . #2's 16.50.



Same here in the "middle". #1's 17.00-17.25 . . . Fancy 2's 16.75.



I can fill the order a quarter cheaper here in the "East end"



This is Keith. I've got #1's 17.25 . . . 2's 16.75.

Prices vary from one end of the yards to the other . . . we can save you money because we cover the entire yards to find the cheapest spots by walkie talkie.

Our new phone number at the

**OMAHA STOCKYARDS**

**731-8403**

**F. R. WEST**

and COMPANY

LIVESTOCK ORDER BUYERS 707 EXCHANGE BLDG.



# The Meat Trail...

## Hormel's H. H. Corey Is New AMIF Board Chairman

H. H. COREY, chairman of the board of Geo. A. Hormel & Co., Austin, Minn., has been elected chairman of the board of directors of the American Meat Institute Foundation, Chicago, succeeding LOUIS F. LONG, president of The Cudahy

cago; JOHN KRAUSS, SR., president, John Krauss, Inc., Jamaica, N.Y.; NELSON MORRIS, II, president, Darling & Co., Chicago, and HUGO SLOTKIN, president and board chairman, Hygrade Food Products Corp., Detroit. The AMIF, situated on the campus



H. H. COREY



PORTER JARVIS



GEORGE LEWIS



L. F. LONG



J. R. BRADLEY



HOMER DAVISON



ROY STONE



JOHN KRAUSS

Packing Co., Omaha. PORTER M. JARVIS, president of Swift & Company, Chicago, was named vice chairman of the Foundation's board, and JOHN R. BRADLEY, president of Agar Packing Co., Chicago, treasurer.

The AMIF re-elected its three executive officers: HOMER R. DAVISON, president; GEORGE M. LEWIS, vice president, and ROY STONE, secretary and assistant treasurer. Newly-elected members of the 17-man board of directors are: CARL T. FISCHER, president, Fischer Packing Co., Louisville; ROBERT T. FOSTER, vice president, John Morrell & Co., Chi-

ago, of the University of Chicago, is a non-profit research and educational institution for the advancement of scientific knowledge, specifically as related to the production of livestock and the utilization of products derived from livestock. More than 250 companies in the meat packing and allied industries, located in all parts of the United States and Canada and in 18 countries overseas, participate through voluntary membership in the support of the Foundation's program. Most of these firms were represented by person or proxy at the AMIF's annual meeting in Chicago.

**BIG ATTRACTION** at Endlich Packing Co., Inc., Green Bay, Wis., is a 6 ft., 3 in. steer that weighs 3,015 lbs. and is 11½ ft. long. Herbert Endlich, firm president, purchased steer for \$26.50 cwt. or total of \$798.97. Since purchase, several thousand persons have visited plant to see steer, whose future is yet undecided, Endlich said.



## PLANTS

Neuhoff Brothers Packers, Inc., Dallas, Tex., has announced a \$1,-000,000 expansion program which will add approximately 50,000 sq. ft. of floor space to its present facilities. The proposed five-story addition will provide more shipping and beef-cooling area and about 400 tons of additional refrigeration, bringing the total refrigeration capacity to almost 1,000 tons. Neuhoff Brothers Packers relocated to Dallas in 1932 from Nashville, Tenn., where its founder, HENRY NEUHOFF, SR., first started in the meat packing business after emigrating from Germany. At its outset, the Neuhoff firm had two plants in Nashville and one in Atlanta, Ga. The business was sold to Swift & Company in 1931 and the following year, the elder Neuhoff, along with his three sons, HENRY, JR., JOHN D. and JOSEPH O., now president, vice president and secretary-treasurer, respectively, started their meat packing business with a little wooden slaughterhouse, 15 employees and one truck. The present Neuhoff operation has about 800 employees and a fleet of trucks serving a four-state southwestern region. General contractor for the new addition is J. E. Morgan & Sons, Inc., of Dallas.

Tiscia & Wade Meat Co., Memphis, Tenn., processor and fabricator of portion-controlled meats, moved into its new plant at 827 S. Main st. at E. H. Crump blvd. JOE and MATTHEW TISCIA and CHARLES WADE are owners of the operation.

## JOBS

The E. Kahn's Sons Co., Cincinnati, has announced six promotions within its managerial ranks. Those promoted and their new positions are: WILLIAM MAXWELL, superintendent of plant engineering and personnel director; KENNETH MCKINNEY, processed meat superintendent; ROBERT RINEAR, product distribution superintendent; EDWARD G. ANDERSON, superintendent of fats, oil and feed; JONAS GREENBAUM, director of new products research, and WILBUR REES, production quality control supervisor.

KENNETH O. CAMPBELL has been named to the newly-created position of transportation supervisor for Peter Eckrich & Sons, Inc., Fort Wayne, Ind. In his new position, Campbell will be responsible for traffic control as related to the movement of products outside the



CHICAGO Association of Hotel and Restaurant Meat Purveyors pays tribute to outgoing president Melvin Solomon (left) of Allen Brothers, Inc., at organization's annual meeting. Presenting citation is Eugene Silverman of Oakland Meat Co. New president of Chicago group is Robert Mac Kimm, Mac Kimm Bros., Inc.

firm's present marketing areas; he will supervise all fleet activities and serve as an adviser to the shipping department on transport movements to Eckrich sales branches, according to HENRY C. ECKRICH, president and general manager of the company. Campbell holds a master's degree in transportation engineering from the University of Michigan, specializing in automotive engineering.

RUSSELL W. RITZ, sales and advertising director of The Rath Packing Co., Waterloo, Ia., was elected to the newly-created office of vice president of sales of the company at the annual meeting of its board of directors, announced HOWARD H. RATH, chairman of the board. Ritz, who started with the company in 1930 as a salesman at the Des Moines branch, joined the company's sales department in Waterloo in 1945 and has been sales and advertising director for the past three years. All other officers of the company were re-elected. They are:

HOWARD H. RATH, chairman of the board; JOE GIBSON, president; GEORGE E. HAWK, vice president; WESLEY W. JENNINGS, vice president; DALE A. KILPATRICK, vice president; L. M. KYNER, vice president; RICHARD W. RATH, vice president; JOHN D. DONNELL, vice president and secretary; HOWARD DEXTER, controller; WILLIS R. NESBITT, treasurer, and HARRY G. SLIFE, assistant secretary. Members

of the executive committee were re-elected. They are: Howard H. Rath, Joe Gibson, W. W. Jennings, Dale A. Kilpatrick, R. W. Rath and John D. Donnell. All 11 directors of the company also were re-elected for terms ranging from one to three years.

PAUL A. CUNNINGHAM has been elected president and CHARLES E. CUNNINGHAM, first vice president, of Cunningham Bros., Inc., a New York City purveyor.

Dr. JACK E. GROSS has been named inspector in charge of the El Paso, Tex., station of the Meat Inspection Division, U.S. Department of Agriculture, succeeding Dr. E. M. CLARK, whose retirement will become effective December 31. Dr. Gross joined the MID in 1956, immediately following his graduation from Texas A & M College, from which he received the degree of doctor of veterinary medicine. Dr. Gross served at Oklahoma City, Okla., and held supervisory positions at Augusta, Ga., and Fort Worth, Tex., prior to his El Paso station assignment.



DR. GROSS

## TRAILMARKS

The newly-elected lieutenant governor of Kansas, HAROLD H. CHASE, has accepted an invitation to make the 1961 "Kansas Meat Packer of

the Year" award during the annual meeting of the Kansas Independent Meat Packers Association. The meeting is set for April 8-9 at the Emporia Hotel, Emporia. Chase serves as attorney for Griffith Provision Co., Downs, Kan.

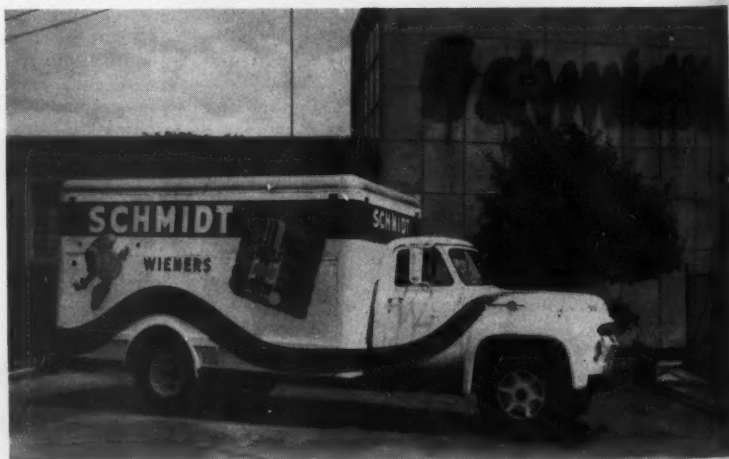
Packer Land Packing Co., Green Bay, Wis., has been granted federal inspection, announced S. W. FRANKENTHAL, president. The firm began operations in Green Bay last July.

WILLIAM ROEGELEIN, president of Roegelein Provision Co., San Antonio, Tex., has been elected president of the San Antonio Manufacturers Association for 1961.

Rudolph Frey, Inc., Buffalo, N.Y., has incorporated a novel sales promotion gimmick with a 1961 calendar the firm is sending its customers. Each page carries a coupon which is redeemable only during that month for 5¢ credit on the particular item offered that month. January features mettwurst; September offers bologna, etc.

JOSEPH O. HANSON, retired president of International Packers, Ltd., Chicago, has been re-elected president of the Chicago Crime Commission for the coming year.

C. A. Durr Packing Co., Inc., Utica, N.Y., re-elected the following company officers for the coming year at its annual meeting: CLARA DURR HARRISON, chairman of the board; JEROME B. HARRISON, president; MARGARET P. DURR, vice president; ARTHUR H. MAUTHE, secretary-treasurer, and JOHN B. TUTTLE, as-



CITATION for outstanding truck design was awarded to the Schmidt Provision Co. of Toledo, O., at National Fleet Maintenance Show held at New York colosseum. Award-winning truck was cited for its appeal to children and extensive use of white to suggest cleanliness and purity. Contest was sponsored by Fleet Owner magazine. Fessel, Siegfriedt, Dooley & Moeller, Inc., Louisville, created the design. One other meat packer, Weiland Packing Co., Inc., Phoenixville, Pa., shared spotlight with Schmidt in team of eight winners.

assistant secretary. All the officers, with the exception of Tuttle, were re-elected directors of the firm along with DONALD B. BICE, who was also reappointed plant manager. JOSEPH J. GASKA was renamed as assistant plant manager.

The annual dinner dance of Meat Trade Institute, Inc., an association of meat packers in the New York City metropolitan area, will be held in the grand ballroom of The Plaza in New York City on January 14. JOHN KRAUSS, newly-elected president of the organization, is chairman of the dinner dance committee.

The refinery department at the Kansas City plant of Swift & Company, Chicago, was awarded a trophy for overall excellence by J. B. MILLER, Swift vice president. R. R. GRAY is manager of the Kansas City refinery department.

## DEATHS

AUGUST STANG, 57, branch manager of the Jersey City, N.J., plant of Armour and Company, passed away. Stang was a veteran of 42 years with the Chicago packing firm and for 20 years had been beef supervisor of the organization's New York district.

ROBERT S. EVANS, SR., 59, employed

in the general superintendent's office, meat processing department, Swift & Company, Chicago, died December 10. He had been with Swift for the past 43 years. Surviving are his widow, MINERVA, a son, ROBERT S., JR., and two daughters, LILLIAN and NANCY.

JAMES J. HOBAN, 75, retired traffic manager at Hunter Packing Co., East St. Louis, Ill., passed away. He retired from the firm four years ago. He had been mayor of Fairmont City, Ill., for eight years during the 1930s. Hoban is survived by two sons and three daughters.

## Nine WSMFA Committees To Meet at Convention

Nine committees named by the Western States Meat Packers Association for 1961 will hold their first meetings of the year during the 15th WSMFA annual meeting, set for Wednesday through Saturday, February 15-18, at the Sheraton-Palace Hotel in San Francisco, announced E. FLOYD FORBES, president and general manager of the association. The committees and chairman and vice chairman of each are:

Industrial relations—chairman, E. Floyd Forbes; accounting—chairman, MARTIN RUSTER, Luer Packing Co., Los Angeles, and vice chair-

man, FRANK BAUMAN, James Allan & Sons, San Francisco; tallow and grease—chairman, A. JOSEPH BABKA, James Allan & Sons, San Francisco, and vice chairman, DONALD SCHAAKE, Schaafe Packing Co., Inc., Ellensburg, Wash.; hide—chairman, SAM RUDNICK, Kern Valley Packing Co., Bakersfield, Cal., and vice chairman, A. R. BURATTO, Meats, Inc., Clarkston, Wash.

Also, marketing agencies—chairman, PROSSER CLARK, Benson, Bodine & Clark Commission Co., North Portland, Ore., and vice chairman, DON E. KENNY, Salt Lake Union Stockyards Co., Salt Lake City, Utah; beef boners—chairman, PAUL BLACK, Acme Meat Co., Inc., Los Angeles, and vice chairman, JOE SILVA, Rudnick & Silva, Stockton, Cal.; beef—chairman, LELAND JACOBSMUEHLEN, Arrow Meat Co., Cornelius, Ore., and vice chairman, OTTO FLORENCE, JR., Independent Meat Co., Twin Falls, Ida.

Also, livestock and conservation—chairman, HAROLD D. KUMMER, Kummer Meat Co., Hillsboro, Ore., and vice chairman, GEORGE S. WRIGHT, Wright Packing Co., San Diego; processing and provisions—chairman, MARTIN B. RIND, Milwaukee Sausage Co., Seattle, Wash., and vice chairman, DAVID DAVIES, Wells & Davies Packing Co., Payette, Ida.

No other stuffer...at ANY price can equal the

## ST. JOHN #2015 CONTINUOUS STUFFER

5000 lbs. of HOT DOGS  
PER HOUR!

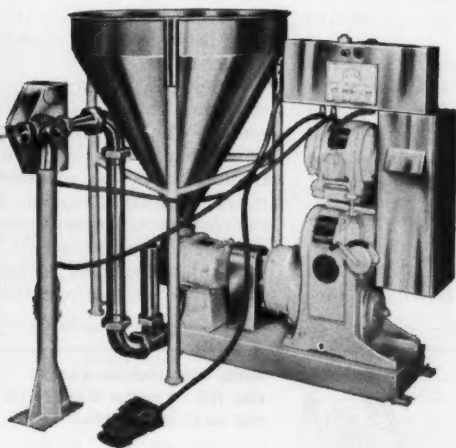
COMPLETE, Ready for installation

**\$4,225<sup>00</sup>**

Write, wire, phone

**ST. JOHN & CO.**

5800 S. Damen Ave., Chicago 36, Illinois





## More Moist Ham OK'd

[Continued from page 15]

subsequent lots should be taken and if the results of consecutive samples fall in this range, the inspector should take action as outlined in a).

"c) Analytical result of 0.1 per cent to 2.0 per cent added moisture in excess of that permitted—The inspector should continue the usual inspection routines but submit samples from subsequent lots. If the results of four consecutive samples fall in this range, the inspector should take action as outlined in a)." )

**"LIBERAL" CONCEPT:** Since ham comes with protein "as is," beyond the control of the packer, and determination of actual protein content is not practical at the processing stage, and since hams vary considerably in fat-lean makeup, some early unofficial comments from the industry questioned the validity of the new MID analytical procedure to determine normal moisture. One source recalled that the MID several years ago considered such a method to check compliance with the now-abandoned green-to-smoked ratio requirement but dropped the idea as unworkable after a series of tests.

Dr. Pals indicated, however, that the MID data have been re-evaluated and the provision of tolerances, which were not considered before, is believed to overcome the earlier objections. He said that the agency considers the four times protein measure on the "liberal side" but is willing to be shown otherwise. In fresh ham, for example, the MID figures show moisture content as averaging 3.65 times protein, he noted. Dr. Pals also commented that many packers who have complained to the MID that their competitors were exceeding the old moisture limits relied on the same analytical procedure to prove their point.

The MID chief pointed out that the new moisture concept also is more liberal than appears at first glance because the old requirements put the green weight ceiling on the meat and "added substances," including the weight of the salt, sugar, etc., in the curing pickle. Thus, while

the new regulations do not permit "added moisture" in cooked cured products, they will, in fact, permit "at least 2 or 3 per cent" more moisture than was permissible under the old rules, he said.

Dr. Pals also noted that many packers now receive green hams that have lost moisture in several days of transit and said the new regulations, unlike the old, will permit them to pick up this shrink in the cure.

The new MID regulations and procedures stem from a three-month review of the validity of the old requirement and control methods from the standpoint of consumer protection and production and marketing practices. After the agency announced the pending review in late September, most industry representatives commenting publicly on the question urged elimination, rather than modification, of the moisture limitation.

## M.I.T. to Expand Work in Food and Nutrition Field

The Massachusetts Institute of Technology, Cambridge, will expand its teaching and research in the field of foodstuffs and nutrition, president Julius A. Stratton announced. To carry out the new program, M.I.T. will create an augmented department of nutrition, food science and technology around the existing food technology department, he said.

Head of the department will be Dr. Nevin Stewart Scrimshaw, director of the Institute of Nutrition of Central America and Panama (INCAP) and regional adviser on nutrition of the Pan American Health Organization, regional office for the Americas of the World Health Organization.

Dr. Scrimshaw, who is currently an adjunct professor of public health nutrition at Columbia University and a visiting lecturer in the Harvard School of Public Health, will assume his duties at M.I.T. as professor of nutrition and head of the department as of August 1, 1961. He will maintain an association with INCAP as a technical director.

"In addition to continuing its im-

portant work in food technology, the plans for the department call for increased emphasis on food science and basic research oriented toward problems of human nutrition," explained Dr. George R. Harrison, dean of the School of Science. "The new program represents a fairly radical change in the work of the department. The change means both an extension into new fields and strengthening of the food technology program in the direction of more basic research, particularly in the area of food toxicology and the effect of food processing on its nutritive value."

## Meat to Alaska

[Continued from page 14]

lift boards, unloading to delivery trucks and unloading at destination. Alaska Freight Lines, Inc. performs the first and last, omitting the 10 intermediate piecemeal handling operations and saving time and cost.

2) Turn-around of barges and tractors is faster, conserving working time for this equipment. The same would hold true for rolling stock involved.

3) Packaging operations are simplified.

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5) No time is wasted on complicated routing procedures. There is no bother with multiple billing. Eliminated are the delays and mix-ups occasioned by lack of coordination between two carriers or two agencies.

Although the preceding advantages are obvious, several obstacles remain. The balanced point of view must take into consideration the frequent lack of cooperation between competing carrier lines, the complex matters of government regulations and tariffs and the obstacles to standardization of containers and container-fitting, proponents say.

## HOG BUYERS EXCLUSIVELY

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1—Model "Cincinnati" Dehairer complete, 2 H.P. motor, 3/60/220

1—400 lb. Buffalo Mixer with stainless steel shell—5 H.P. motor 3/60/220

1—300 lb. late model Randall stuffer complete with tubes, air and meat valve

ALL IN EXCELLENT CONDITION

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Phone MA 6-2827.

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1—#4AC Automatic Food Shaping Machine Patty Maker. Slightly used, all stainless parts, capacity 3600 patties per hour, complete with conveyor and half horsepower, single phase motor—\$1150.00.

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1—Randall Model #200 Meat Mixer, new with a capacity of 200#, 2 horsepower, 3 phase motor—\$895.00.

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1—Used Buckeye Dehairer—36 rubber paddles with 1½ horsepower, 3 phase motor—\$250.00. Order subject to prior sale and confirmation.

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1—JONES-SUPERIOR #53 RIGHT-HAND BAND SAW, COMPLETELY RECONDITIONED. Box FS 599, The National Provisioner, Inc., 15 W. Huron St., Chicago 10, Ill.

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FOR SALE: No. 422 "Boss" friction carcass dropper with spring actuated return. Brand new. Never used. Will sell cheap to quick buyer. FS-555, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

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FOR SALE—ONE MODEL 500 TY PEELER COMPLETE. USED LESS THAN SIX MONTHS. FS-574, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

2 Bacon Over-Wrapping machines, Model FB-1, 2 phase, 60 cycle AC. Used, in excellent condition. Write to Box FS-577, THE NATIONAL PROVISIONER, 537 Madison Ave., New York 22, N. Y.

FOR SALE: No. 58 BOSS JUMBO U DEHAIRER. Cast iron frame. Complete feed conveyor, 25 H.P. motor 220 volts, 60 cycles. FS-592, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

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A-3144—MIXER: Globe 1000#, vacuum type, air tilt, 10 HP. motor.....\$1,150.00  
A-3151—STUFFERS: (2) Boss 500# cap. ea. \$1,050.00  
A-3230—BACON PRESS: Dohm & Nelke Jr. 5 HP. motor.....\$1,650.00  
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A-3282—COOKER: Anco (blood) 5' x 12', flat head, chain drive, 30 HP. motor.....\$1,450.00  
A-3287—COOKER: Anco: 5' x 10', flat head, style #3 drive, 20 HP. mtr.....\$1,250.00  
A-3343—UNIT COOLERS: (3) York mdl. 1WV-7A, direct expansion ammonia, brine defrost approx. 18 ton cap. each, coil area 18.53 ft. 9250 CFM inc. motors, valves, fittings, etc.....ea. \$ 850.00  
A-3082—TRIFE WASHER: Boss V type, size 12, w/1 HP. motor.....\$ 300.00  
A-3168—PAK-ICER: Vilter 1 ton cap., stainless steel lined Bin, 3 HP., with ¾ HP. Shaver.....\$ 800.00

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Now low prices have been established on the following equipment:

O-5022-A—PUMP: Nash Hytor, 5 HP. 440 volt, 2 ph. 60 cycle.....\$ 150.00  
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O-5170—HIDE SHAKER: Can Pac.....\$3,000.00  
O-5225—DEHORNER: Globe pneumatic.....\$ 225.00  
O-5230—SIDE FINGER CONVEYOR: Ice Chain type, Fingers 3/8" c-c, approx. 325' long, w/Revas Vari-speed drive.....\$ 850.00  
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All above offerings on foundation.

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# BARLIANT & CO.

# CLASSIFIED ADVERTISING

[Continued from page 33]

## POSITION WANTED

### AGGRESSIVE SALESMAN:

Capable of handling men, promotional and advertising, desires position as sales manager or assistant sales manager independent packer, south or southwest area. Have been employed by a major packer as a full line salesman, car route and branch, for past 8 years. Am presently employed. W-566, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

**SUPERINTENDENT or SUPERVISOR:** Thoroughly experienced in all phases of packinghouse, gained in large American meat packing plant in South America and U.S.A. Especially experienced in canning, figuring costs, quality and time study work. Good references. Speak English and Spanish fluently. W-581, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

**PLANT MANAGEMENT:** 30 years' experience in top plant management and supervision. Well versed in personnel relations and cost analysis. 47 years of age. Well educated and in perfect health. Interested in either day or night operation. W-570, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

**INDUSTRIAL ENGINEER; SENIOR ENGINEER:** 15 years' experience in all phases of the meat industry, time study, incentives, layout, methods and costs. Wish to relocate. W-579, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

**MAINTENANCE MAN:** Experienced in packing house and canning plants. Also in supervisory capacity. W-593, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

**FOREMAN-SUPERINTENDENT:** Accustomed to large packinghouse operations. 25 years' practical experience in hotel, restaurant, institution supply, portion control and beef boning operations. Have basic training in industrial engineering and administration. Excellent record. W-569, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

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### DIRECTOR — RESEARCH SOUTH AMERICA

Large international meat processing company is looking for a food technologist or chemist, PH.D. with practical research experience in the meat industry, plus executive ability to manage food research and development laboratory in Buenos Aires, Argentina. Salary open. Send resume. W-585, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

## HELP WANTED

**WANTED—**Qualified man needed to take over active management of canned meat plant. Must be experienced in buying, selling and general management of the canned meat business. This is an excellent opportunity for the right man. State qualifications in first letter. Replies held in strict confidence. Box W-600, The National Provisioner, Inc., 15 W. Huron St., Chicago 10, Ill.

### RESEARCH KITCHEN PRODUCT DEVELOPMENT

Leading national supplier of basic ingredients to the Food Industry has excellent opportunity in its Research and Product Development kitchen. The company is located in Chicago. The applicant should have 10 years experience in meat processing including curing, smoking, sausage manufacturing, and related meat areas. Should have enough supervisory and organizing experience to direct Research and Development activities. Should be creative and research minded. Excellent salary for the man with the proper qualifications. Reply in detail stating experience and salary required.

W-576, THE NATIONAL PROVISIONER  
15 W. Huron St., Chicago 10, Ill.

**SALES MANAGER:** For an old and well established meat packer in New York state. Must be thoroughly experienced in setting up and supervising complete sales department—particularly in the sausage and processed items. Excellent opportunity for the right man, as this is a growing concern. Please send complete resume in first letter. Our employees know about this ad. W-594, THE NATIONAL PROVISIONER, 527 Madison Ave., New York 22, N. Y.

**SAUSAGE MAKER:** New York area. Must be qualified and experienced. Must also have good references. Apply to Box W-595, THE NATIONAL PROVISIONER, 527 Madison Ave., New York 22, N. Y.

**SAUSAGE MAKER:** Small eastern packer desires sober man who must know the business. To take charge of curing cellar. Small town. State age and salary wanted. W-578, THE NATIONAL PROVISIONER, 527 Madison Ave., New York 22, N. Y.

**WORKING SAUSAGE FOREMAN:** All round #1 man wanted. Capable of handling help, work sheet and cost. No drinking. State experience and salary expected. Apply to CANNON'S SAUSAGE, 3301 N.W. 48th St., Miami, Florida.

**HOG KILL FOREMAN:** Midwest meat packer has opening for qualified man. Splendid opportunity for advancement. Good salary. Submit complete resume in first letter. W-571, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

**CANNING FOREMAN:** Midwest meat packer has opening for well versed man in canning operation. Splendid opportunity for advancement. Give salary requirement and submit complete resume in first letter. W-572, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

**PLANT SUPERINTENDENT:** First class man wanted by beef-pork M.E.D. Inspected packer in southwest. Good opportunity for well qualified man. Good salary, bonus and retirement benefits. All replies treated in strictest confidence. W-586, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

## EQUIPMENT WANTED

**WANTED:** Provision manufacturer in New Jersey area would like to purchase good used equipment, Linkers, stuffers, etc. EW-589, THE NATIONAL PROVISIONER, 527 Madison Ave., New York 22, N. Y.

**INTERESTED IN:** 5 x 9 COOKER IN GOOD CONDITION. Reply to STAPPENBECK RENDERING WORKS, 2013 Louis St., Utica 4, N. Y.

**WANTED:** Complete hog kill equipment package for 150 to 200 hogs per hour. Used equipment in good condition preferred. EW-596, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

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- GRAVITY
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- CONTINUOUS POWER

**MINIMUM SPACE.** For example, only requires 600 sq. ft. of floor space with capacities up to 40 cattle per hour, from the first hind legging through the splitting operation.

**FLEXIBILITY AN EXCLUSIVE ANCO FEATURE.** By spreading the carcass from a single trolley with a swivel eye-bolt and spreader, each carcass can be turned a full 360°. No other system offers this flexibility which permits an operator to complete several operations from one position. Since the carcass is conveyed to and from the operator, little or no time is lost in walking from carcass to carcass as on the bed system. This makes for efficiency, less fatigue and better production.

**STOOPING AND TEDIOUS JOBS ELIMINATED**—such as handling heavy shackles, manually handling trolleys and spreaders, half hoisting, and hanging of cattle on dressing rail.

Ask your ANCO sales engineer about the various arrangements available which make it possible to install an ANCO lower maintenance cattle rail system in your present space—at the same time, increase production.

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**THE ALLBRIGHT-NELL CO.**

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# SMOKEHOUSES by



THE EMBLEM OF QUALITY

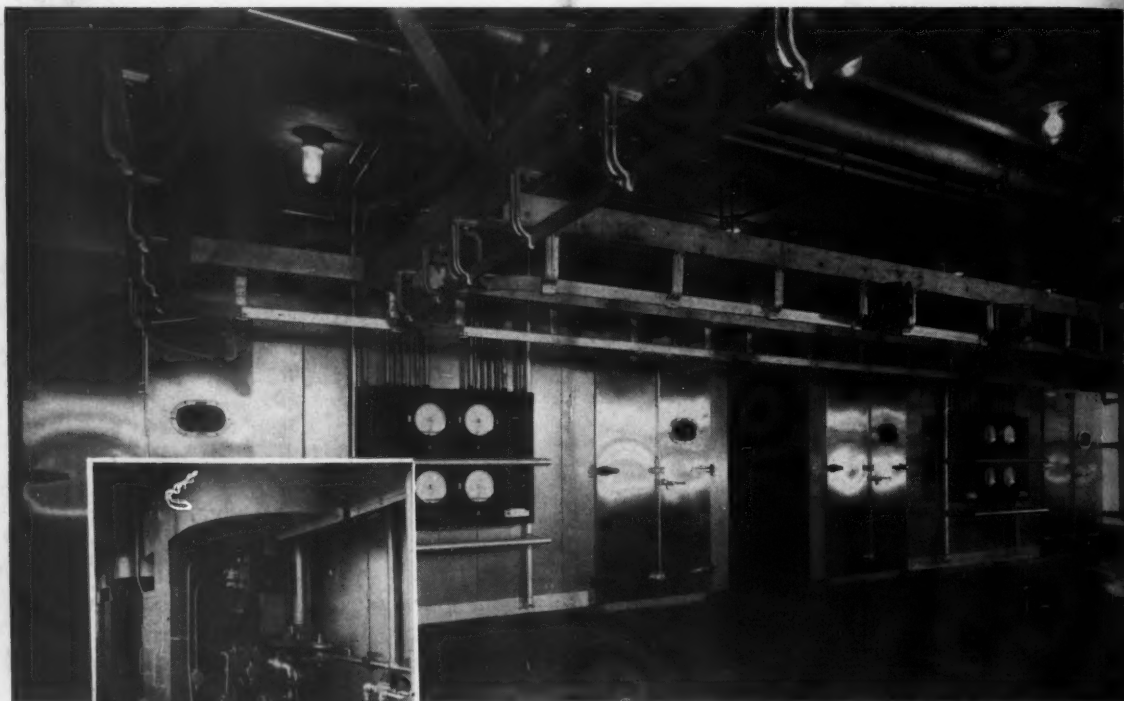


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